Marlborough Forest Interpretation Plan

July 1990

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in association with

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MARLBOROUGH FOREST

INTERPRETATION PLAN

Submitted to:

Ontario Ministry of Natural Resources

Regional Municipality Ottawa-Carleton

Rideau Valley Conservation Authority

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MARLBOROUGH FOREST INTERPRETATION PLAN: ACKNOWLEDGEMENTS

This Interpretation Plan has been prepared by the professional planning team of Lorna McCrea, Peter Whiting, David Lashley and associates, under the guidance of a review committee representing the three commissioning agencies: the Ontario Ministry of Natural Resources, the Regional Municipality of Ottawa-Carleton and the Rideau Valley Conservation Authority.

As requested in the terms of reference, the planning team has concluded this report with several action plans, detailing the most appropriate phasing of alternative options and preparing a rough cost estimate for each. The acceptance and public release of this report in no way binds the Carleton Place District Office of the Ontario Ministry of Natural Resources to fund all, or indeed any, of these proposals. Indeed, one of the major issues flagged for management review is the need for OMNR to work together with RMOC and other interested parties, to clarify mandates and possible funding arrangements for the interpretive services and facilities recommended herein.

It was the planning team's good fortune to have a strong steering committee, to help us focus our efforts and recommend development options acceptable to the various agencies and public interest groups concerned with wise use and "sustainable development" of the Marlborough Forest. The assistance of the following agency representatives is gratefully acknowledged. We look forward to working with them again, should we be called upon to help them implement aspects of this Plan. Their signatures, below, indicate that they have reviewed the June 1990 Draft of this document, and provided their input regarding revisions, for inclusion in this, the final, report. Any remaining errors and omissions are the responsibility of the authors.

STEERING COMMITTEE:

Gary Nielsen, R.P.F./MNR Carleton Place District	Day/Month/Year
Donald Cuddy, MNR: Kemptville Regional Office	Day/Month/Year
Lesley Paterson/Regional Munic. Ottawa-Carleton	Day/Month/Year
Cliff Craig/Rideau Valley Conservation Authority	Day/Month/Year

MARLBOROUGH FOREST INTERPRETATION PLAN

1. INTRODUCTION

The Marlborough Forest comprises some 12,200 hectares of land in the southwest corner of the Regional Municipality of Ottawa-Carleton. It is designated in the Official Plan as a **Natural Environment Area**, the largest such tract in the Region.

The Regional Municipality owns some 7,700 hectares within this NEA boundary. All resource management on these public lands is carried out by formal agreement with the Ministry of Natural Resources, through its Carleton Place District Office. Recreational and educational uses are permitted within the Natural Environment Area, provided they do not interfere with the rights of adjacent private landowners, nor threaten the resources that the Forest was set aside to protect. Yet at present RMOC has no mandate to develop Recreation/Interpretation Services within the Forest.

The Ministry of Natural Resources **has** done some work in this area, however. Hunting and snowmobiling are popular recreational pursuits and MNR maintains an extensive network of logging roads and winter trails that facilitate this access. Demand for other recreational facilities is low. Yet the Rideau Trail cuts the Forest on a NE/SW diagonal, and it is maintained by MNR in cooperation with Rideau Trail Association volunteers (current use: 2-300 people a year). Similarly, a 4.5 km. walking trail departs from Cedar Grove, the Forest's only picnic ground. It has been brushed, bridged and wood-chip-surfaced by MNR work crews, but would be better used if it had some form of visitor orientation (maps, self-guiding trail media).

This leads us to the purpose of this report: **Interpretation** being defined as the fostering, by whatever means, of public **awareness and understanding of our natural/cultural heritage**, by encouraging contact with "the real thing" (plants, animals in their habitats). The NEA would appear to have considerable untapped potential in this regard. So this study was commissioned as a "supplementary" to MNR's 20-year Resource Management Plan for Marlborough Forest. Prepared under the auspices of MNR, RMOC and the Rideau Valley Conservation Authority, it first identified current and future supply and demand for Nature Interpretation Services (taking into account regional population projections). It analyzed the resources that might be interpreted, grouping them into messages and themes. Finally, it selected, located and planned for a priorized "wish list" of interpretive media and facilities.

MARLBOROUGH FOREST INTERPRETATION PLAN

1.1. QUANTITATIVE ASSESSMENT OF INTERPRETIVE DEMAND

The Regional Demand Study was a critical first step in the planning process: its conclusions determining the direction and scope of all developments proposed in the Interpretation Concept. A complete report is presented in Appendix 3. Included are tables charting population projections for all sectors of the Regional Municipality of Ottawa-Carleton, from the 1986 density of over 600,000 to about 770,000 in the year 2001. The analysis suggests that suburban growth in the eastern and southwestern sectors, coupled with increasing public awareness of the environment, will place greater demands upon the few large natural areas within the Region. Two major groups are expected to become the largest source of the demand for Interpretation Services at public natural areas: nature observers and educational groups.

On the basis of a national study of wildlife-related activities, certain assumptions were used to derive an estimate of potential participation in a typical public Interpretation Program, by residents of the Region. It was estimated that up to 100,000 activity days might be spent in the Marlborough Forest, by some 13,300 area residents, if such services were to be provided.

Projected educational group use of a Marlborough Forest Nature Interpretation Program was arrived at by comparing current school use of other, similar regional programs and by interviewing school authorities. These discussions yielded a quantitative assessment of demand while clarifying the needs and expectations of potential program participants (matched to themes/services being proposed).

Interviews with local Boards of Education and teachers indicated some interest, but the total number of projected users is modest: a maximum of 4,000 students per year, once the program is up and running. Thus, total potential program use for Marlborough Forest is estimated at 17,000 persons/year, of which 23.5% would be by educational groups. Naturally, the demand for, and use of, such programs would be greatly influenced by the type, quality, location and promotion of the Interpretive Services developed.

For comparison purposes, 1989 attendance at Baxter Conservation Area was 14,434 (9,150 day-users/nature observers; 5,284 or 36% students/organized groups). At the more distant Foley Mountain Conservation Area, educational group figures of 5,360 accounted for 22% of the 24,360 attendance for 1989. Particulars on these and ten other regional Nature Interpretation programs are tabulated in Appendix 2.

1.2. RATIONALE FOR NATURE INTERPRETATION SERVICES

The Supply Study findings are tabulated in Appendix 2. Few of the 12 regional "players" surveyed have securely-funded Interpretation programs and, whether they be extension or on-site, personal or self-guiding, the majority can be described as "supply-driven".

Severe resource constraints notwithstanding, most of the principal suppliers of these services within a 75 km. radius of Marlborough Forest are carrying on at least **some** aspect of their programs. The role(s) that Nature Interpretation can and does play, for these agencies, are described below (several may apply to each area):

Such programs are a means of communicating key corporate messages.

This is such a valuable tool that it is used by all areas surveyed. As far as the Forest is concerned, RMOC could explain the role and significance of its designated Natural Environment Areas, while introducing some of the issues and concerns that relate directly to this status: the Forest's contribution to the Quality of Life and conservation of wetlands (State of the Environment) being key. Certain MNR corporate messages are also relevant (role in fostering heritage appreciation/awareness of integrated resource management).

They demonstrate good corporate citizenship in a local community.

Most agencies have goals about cooperating and building goodwill in their home communities. Hard feelings were generated locally, when the NEA was set aside. And the Advisory Committee has voiced concern about conflict over the consumptive versus non-consumptive recreational use of the Forest (how to balance hunting with trail-based recreation/nature observation). Given this, RMOC/MNR support that would allow schools and continuing education facilities, the Scouting movement, 4-H Clubs and related groups to learn about the Forest NEA could be a most beneficial community relations project.

They attest to an agency's wise use of "public" natural resources.

Recreational/educational facilities are a part-and-parcel of Forest Reserves the world over and provided care is taken in their siting, design and upkeep, they can be a low impact/high benefit land use.

1.2. RATIONALE FOR NATURE INTERPRETATION SERVICES (Cont'd)

They are proven management tools for reducing vandalism and litter.

By sensitizing Forest users to the value of the resource being protected, and by fostering more use of the area by those with a strong conservation ethic (a built-in "ecological neighbourhood watch" service), MNR can garner support for environmental cleanup (litter ranges from beer cans to stripped and abandoned vehicles.)

They help build a support-base for resource conservation measures (useful if land-manager must lobby for scarce protection dollars).

A more aware regional population, whether they actually visit the Forest or not, is a potential source of support when estimates are being tabled or expropriation dollars are needed. The NCC recently benefited from such strong public support during its multi-million-dollar property purchase of threatened Stony Swamp wetlands and an area abutting Pink Lake, Gatineau Park.

RMOC officials may need similar backing if a land swap with MNR is to be arranged (e.g. areas recommended for ANSI conservation, for interpretive use or recreational access, outside the presently-designated NEA). Similarly, MNR might use the support to work with police on an enforcement program targeting the cedar rustlers now stripping several parts of the Forest.

Some fit under a core-funded "conservation information" umbrella.

This applies particularly to the Conservation Authority programs, such as those at nearby Baxter. Here, a Visitor Information Center serves the on-site needs of the visiting public while informing them of the resources, the hazards and the ecological relationships of the Rideau River floodplain.

Nearby, MNR's Forest Station at Kemptville hires an April-to-December forester for the sole purpose of booking and presenting both school- and public-oriented forest conservation messages. And on a more modest, "extension" level, the Larose Forest anniversary tabloid proved to be an excellent tool for making Ontarians aware of this land reclamation success story.

1.2. RATIONALE FOR NATURE INTERPRETATION SERVICES (Cont'd)

Some are a means of cooperatively promoting tourism opportunities.

The Rideau Canal Interpretation program, particularly the Burritt's Rapids "Tip to Tip" self-guiding trail, encourages boaters locking through the system to pause and explore the natural and historical resources of the communities along the Kingston-Ottawa corridor. A Paden Road self-guiding trail would be within mountain-biking distance of this facility, as well as Rideau River Provincial Park.

Some are used to train a student workforce or foster volunteerism.

This is particularly true of the ongoing, family-oriented personal campground-based programs at Murphy's Point Provincial Park. Here a Visitor Services Coordinator works with summer Experience staff, guest naturalists and local volunteers to put on an animated summer program of special events (e.g. Loyalist Days). In the Forest, such cooperative efforts have already begun: MNR/the Rideau Trail Assoc. (wetland traverses), LACAC/heritage groups (identify and stabilize sites) and local field-naturalists (fen ecology walks, articles).

In conclusion, although the Supply & Demand Studies did not reveal sufficient interest to warrant the development of **personally-led** Interpretive programs in Marlborough Forest, nor even extensive, costly trail facilities, the above analysis does suggest that some **Interpretive development can be justified.**

A few carefully-targeted, self-guiding Interpretive media in key parts of the Forest would help the authorities fulfil many of the functions cited above, for a relatively modest expenditure of resources.

The steering committee accepted this conclusion and invited the planning team to continue with the next phase: that of identifying Interpretive themes and messages for Marlborough Forest that would supplement or complement those of the 14 other agencies operating Nature Interpretation Programs in the region (readers can locate these conservation areas on the accompanying Regional Context Map).

MARLBOROUGH FOREST INTERPRETATION PLAN

1.3 THEMES AND MESSAGES

In consultation with the steering committee, the planning team has developed a key theme statement for the Forest (its proposed Corporate Message) and two major interpretive themes. These take into account the special or characteristic features of Marlborough Forest and **complement** the themes presented by the other major suppliers of Nature Interpretation programs in the region.

Corporate Message:

The Region's Largest Natural Environment Area; set aside in the Regional Official Plan, like its smaller counterparts:

-to preserve areas for wildlife;
-to preserve areas of scientific and educational value;
-to preserve areas of botanical interest;
-to preserve areas of scenic value (less applicable here)
-for forestry purposes and
-to preserve water supplies and wetlands.

Interpretive Themes:

1. Life on the Limestone Plain: 60% emphasis

1.1 Rocky, Limy and Wet (geology: gravel, shallow-to-bedrock soils; & influence on land use: subsistence farms)

1.2 The Fragile Fen Habitat (permanently-flooded, open grassland)

1.3 Other Marlborough Wetlands (beaver ponds, marshes and swamps)

1.4 The Alvar Community (rare lime-loving abandoned-field plants)

1.5 Coyote Country (cedar groves; interspersed clearings, forest)

2. Integrated Resource Management: 40%

2.1 Natural Forests (managing for a healthy, diverse ecosystem)

2.2 Plantation Forests (regeneration on fields, challenging sites)

2.3 Managed Wetlands (waterfowl nest-boxes, water level control)

2.4 Feature-Specific Management (deer/grouse/rare plant habitats; plan recommends MNR add heritage)

LEGEND

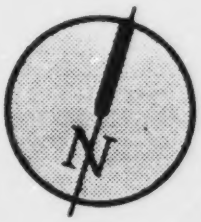
Regional Municipality of Ottawa\Carleton

Rivers

Highways

Smiths Falls Limestone Plain

Marlborough Forest



Scale

10 5 0 10 20 30

KILOMETRES

STUDY SITE LEGEND

1 Baxter Conservation Area
2 Foley Mountain Conservation Area
3 Purdon Conservation Area
4 Morris Island Conservation Area
5 Burritt's Rapids Lock Station
6 Stony Swamp Conservation Area
7 Gatineau Park
8 Mer Bleue Conservatoin Area
9 G.H. Ferguson Forest Station
10 Larose Forest
11 Murphy's Point Provincial Park
12 Rideau River Provincial Park
✖ Not studied (similar to 11 & 12) Charleston Lake & Fitzroy P.P.

REGIONAL CONTEXT

1.4 EVALUATION OF INTERPRETIVE RESOURCES

During the 1980s, Life Science Inventories were commissioned to document the botanical and faunal significance of RMOC- and MNR-owned parcels in and around Marlborough Forest. Local heritage and naturalist groups are adding to this body of knowledge on an ongoing basis. And MNR's just-completed 20-year Resource Management Plan contains invaluable information on current land use in the Agreement Forest, as well as upcoming silvicultural and wildlife management operations.

The interpretive planning specialist used these and other reference sources to compile a comprehensive Interpretive Resource Summary for Marlborough Forest (Appendix 1 and its Selected Bibliography). The narrative is organized into themes and sub-themes, presenting only those Interpretive Resources that occur in "clusters" within the huge area encompassed by the MNR-NEA boundaries. Areas of high potential are those allowing several sub-themes to be interpreted in the same general area. On the following page is a checklist of these Interpretive Resources, intended to supplement the map found in the back pocket of this report. Note that this Interpretive Resources and Land Use Map also highlights only those resources best suited to communicating the Forest's two Interpretive themes.

During the resource analysis phase, 8 sectors were rated good-or-better, for their interpretive potential. All were systematically evaluated using criteria adapted specifically for this planning exercise (see Table 1: Selected Sectors). Accessibility and carrying capacity weighted strongly, and proximity to other publicly-owned parcels and visitor/recreational services also entered into the calculation. Scenic values, the cost to develop or administer and the location vis-à-vis the RMOC/NEA boundary were pertinent, but less critical, factors affecting the overall rating.

Planning is often an exercise in priorizing, and in the comparison, the Cedar Grove Walking Trail and two other sectors rated priority development. A fourth sector with many interesting resources (the Central Forest/Phragmites Fen) was flagged for review at a later date (in reserve pending increase in demand): it would require considerable trail and fen boardwalk work, to render it accessible. At the steering committee's request, an alternative along Roger Stevens Drive, suited to development as a general nature trail, was also examined. Of only "fair" interpretive value, it would have earned a rating of 59% overall. It is treated in the Action Plans section under the "Roger Stevens Forest Management Trail" heading.

1.4 EVALUATION OF INTERPRETIVE RESOURCES (Cont'd)

Lot-Concession	Compartment	INTERPRETIVE RESOURCES CHECKLIST
		Cedar Grove Trail
16 - 5	79	Beekmantown limestone, walking fern
		Limestone Plain Study Area
19 - 4	87d	bee-tending lease on abandoned field
18 - 4	86h	jack pine/cedar planted on old field
	86d	rock piles, reportedly incl. fossils
	85j	burnt-out stumps from 1870 Fire
21 - 4	91j	Flood Road mini-fen
20/21 - 4	91i	Ducks Unlimited Stevens Cr. Project
	90c	flooded cedars/coyote/turkey vulture
	90h	most avifaunal diversity; 1870 fire
19 - 4	86c/i	beaver ponds, swamp sparrow
19 - 3	102a/103g	second fen (unclassified wetland)
19/20 - 3/4	88/9/101a	Flood Rd. alvar
	87b, 103i	mature mixed woods with sugar maple
		Paden Road Sector
23 - 2	109d	trail-side 1 ha. 100% poplar grove
23 - 2	111c	sugar maples/significant plant hab.
	111g	Torrey's rush; planted larch, cedar
	112	open oak parkland
22 - 2	109	mature cedars
	109Ah	cedar/alvar barren/upland wh. aster
23e-2		jack pine plantation: cut/underplant
23j-2	109	white pine plantation in '91: 10,000
21/22-2	109/9A	Sand Hills Ducks Unlimited Project
23/24-2	111/2	Lower Brassils Creek, south end Wall
231-2	109	wildlife field maintenance: brushing
28 - 2	C-5	Gilroy Farm (LACAC Heritage desig'n)
		Central Forest/Phragmites Fen Sector
15 - 7	49Ac	treed swamp fringing open sedge fen
15 - 6,7	25Bb, 48b	sugar maples/significant plant hab.
16 - 7	49e	old heron rookery (natural pond)
16 - 7	48c	natural colony rams'head lady-slipr.
	48f,j	significant wildlife
		Outside NEA
29/30-4	96	Peach-leaf willow floodplain forest

Table 1..

Selected Sectors Criteria and Weightings	Schoolhouse Sector (68 and 67)	Gilroy Farm (114/environs)	Cedar Grove Trail (76 & environs)	Flood Rd Alvar/Stevens Cr (101/3, 90, 91, 86/7/8/9)	Paden Rd. Southwest (111, 109, 109A)	Central forest/Ph. fen (25, 25B, 48, 49, 49A)	West central forest (40, 41, 43, 44)	NW Forest/Hydro/CNR (7 & 8)
Interpretive Potential x5	good: 3x5 = 15	good: 3x5 = 15	v. good: 4x5 = 20	exc.: 5x5 = 25	exc: 5x5 = 25	v.good: 4x5 = 20	good: 3x5 = 15	good: 3x5 = 15
Accessibility/main road x3	v. good: 4x3 = 12	fair: 2x3 = 6	exc. : 5x3 = 15	good: 3x3 = 9	good: 3x3 = 9	poor: 1x3 = 3	fair: 2x3 = 6	good: 3x3 = 9
Space/carrying capacity x3	good: 3x3 = 9	v.gd: 4x3 = 12	v. good: 4x3 = 12	good: 3x3 = 9	good: 3x3 = 9	good: 3 3 = 9	v. good: 4x3 = 12	v. good: 4x3 = 12
Proximity/other parcels x2	poor: 1x2 = 2	poor: 1x2 = 2	v. good: 4x2 = 8	v. good: 4x2 = 8	fair: 2x2 = 4	good: 3x2 = 6	fair: 2x2 = 4	poor: 1x2 = 2
Proximity to rec.opport.x2	fair: 2x2 = 4	fair: 2x2 = 4	exc. : 5x2 = 10	good: 3x2 = 6	good: 3x2 = 6	fair: 2x2 = 4	fair: 2x2 = 4	poor: 1x2 = 2
Proximity to vis.services2	poor: 1x2 = 2	poor: 1x2 = 2	v. good: 4x2 = 8	poor: 1x2 = 2	poor: 1x2 = 2	poor: 1x2 = 2	poor: 1x2 = 2	non-existent: 0
Scenic values, aesthetics	good: 3x1 = 3	v.gd.: 4x1 = 4	good: 3x1 = 3	good: 3x1 = 3	good: 3x1 = 3	v.good: 4x1 = 4	fair: 2x1 = 2	fair: 2x1 = 2
Aquirable: MNDC/3rd party	good: 3	good: 3	excellent: 5	excellent: 5	v.good: 4	excellent: 5	excellent: 5	excellent: 5
Cost to develop/administer	fair: 2	fair: 2	very good: 4	good: 3	fair: 2	fair: 2	fair: 2	fair: 2
Comparative Ratings	52%	52%	85%	70%	64%	55%	52%	49%
Interim Use Options and Program Development Opportunities (CONCEPT)	R.Trail winter use (interp. potential limited; no media)	R.Twp. heritage groups protect; ID, Paden media	trailhead map/self-guiding pamphlet; ed'n groups/public	leaders' field trip kit + map re: Cedar Grove link; educational groups/public	self-guided walking trail & bike link to R.Canal + Prov. Park	needs extensive trail-work to access fen site (in reserve/later dev.)	optional spur, from central forest/fen trail once developed	lowest priority; no interpretive facilities recommended at present.
Estimated Resources Needed 1991/2: $, Pys, Volunteers	Vols. & status quo discourage vandals	Co-op project; $ if future dev	$5K (research done; illust'n & prod'n)	$7.5K (research, writing, design, desktop publish)	$10K + future road-work, graded P. lot			

2. INTERPRETATION CONCEPT

2.1. PROPOSED INTERPRETATION OBJECTIVES

This section proposes one corporate message objective, and two theme-related objectives for Marlborough Forest. These have been derived from the three preliminary phases of the planning exercise:

-they take into account the many issues raised by the demand study

-they complement the goals of the 12 other regional nature programs

-they capitalize upon the Forest's special interpretive resources.

Together, they help define a "niche" for interpretation in the Forest, and form the rationale for the initiatives recommended.

TO FOSTER PUBLIC UNDERSTANDING OF THE ROLE OF THE FOREST AND,

IN PARTICULAR, ITS STATUS AS A DESIGNATED NATURAL ENVIRONMENT AREA,

WITHIN THE OTTAWA-CARLETON REGION:

- by ensuring that any new or revised communications media that pertain to Marlborough Forest highlight this key corporate message;

- by giving more prominence to the Marlborough Forest in RMOC plans and publications (e.g. reports on the State of the Environment or on the Quality of Life), in keeping with its significance as the largest conservation area in the Ottawa-Carleton Region;

- by using this introductory message, where appropriate, as the springboard for discussing the changing issues and challenges of maintaining a Natural Environment Area so close to an urban setting (managing a public/private-land patchwork and working to balance the recreation/protection mix).

2.1. PROPOSED INTERPRETATION OBJECTIVES (CONT'D)

TO PROVIDE OPPORTUNITIES FOR THE EXPLORATION AND APPRECIATION OF THE MARLBOROUGH FOREST AS A REPRESENTATIVE PORTION OF THE PHYSIOGRAPHIC REGION KNOWN AS THE SMITHS FALLS LIMESTONE PLAIN:

- by orienting existing and potential visitors to accessible sectors of the Forest that illustrate the Smiths Falls Limestone Plain's characteristic, significant, or unique bio-physical features;

- by planning educational media aimed at increasing awareness of the Limestone Plain as one of Ontario's major physiographic regions and of the Forest itself, as a prime example;

- by defining the relative value/potential of these sectors for interpreting this major theme, so that future resource management initiatives, access plans and any facility development can take this into proper account (e.g. follow-up Recreation Plan).

TO PROVIDE OPPORTUNITIES FOR VISITORS TO LEARN ABOUT HOW THE NATURAL AND CULTURAL RESOURCES OF MARLBOROUGH FOREST ARE MANAGED:

- by encouraging visitation of selected "windows" where integrated environmental management practices can be viewed, in the field;

- by ensuring that explanations highlight the "players" as well as the techniques, including the role of Ministry of Natural Resources and other local "stewards", such as the private landowners holding Agreement Forests and cooperating agencies like Ducks Unlimited, the Ruffed Grouse Society, local heritage/field-naturalist groups.

2.2. SUMMARY OF SERVICE REQUIREMENTS

To ensure that planned Interpretation facilities are responsive to the needs and expectations of Forest users, Table 2 on the next page summarizes the "characteristics of demand" of the following visitor groups, all of whom now use, or are destined to use, the Interpretation and/or Recreation Services of Marlborough Forest:

Hunters: These are concentrated in the fall (duck season runs from late-September on; deer season, 1 wk in early November; hare hunted through March). However, target shooting and varmint/coyote-hunting continues year-round, as do the hunt club leases. Trails have been blazed in a network out from these camps, but use is by no means restricted to these areas. Larose Forest aside, this is the only large tract of natural public land where this activity is allowed. (Interpretive needs appear limited to wildlife/safety information).

Educational Groups: These include elementary school to university, plus other organized groups such as Scouts, 4-H Clubs or Continuing Education classes (e.g. edible wild, Canadian flora & fauna, nature photography, landscape painting). Their needs aren't yet being met.

Trail Users: These may be subdivided into the quite different needs and expectations of winter users (primarily cross-country skiers, with some snowshoers) and hikers/bikers in the other three seasons.

Nature Observers: These include a few general nature walkers (who tend to use the Cedar Grove Walking Trail, so they won't get lost) and avid field-naturalists, who use the railway right-of-way and other, less defined means-of-access to reach those parts of the Forest featuring wildlife of interest to them (ANSI entomologists, botanists and birders come to seasonally census/study/photograph).

Picnickers and other day-users: A small user-group now, they could be encouraged to become "nature observers" if offered self-guiding media or, better yet, personalized hands-on interpretive programs.

Powered Trail Users: These consist of snowmobilers, ATV enthusiasts and horseback riders, who have the means of accessing virtually the entire forest on a day's outing. They travel too fast to see much of the wildlife. Use falls within the scope of the Recreation Plan.

MARLBOROUGH FOREST INTERPRETATION PLAN

SUMMARY OF SERVICE REQUIREMENTS (NEEDS, EXPECTATIONS BY MAJOR VISITOR ACTIVITY GROUP)

Table 2:

Service Requirements: MARLBOROUGH FOREST	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
1. Hunters	zone/season it's allowed	public land well signed	spp. habitat ID, MNR improvements, safety	unfettered access, fall	spp. habitat management	hunt camps, good access rds
2a. Ed'n groups: schools	contact person; info. on unique resources, themes & hours, days of program (prefer if free service)	clear directions/on-site trailhead maps, facility for bus parking/boarding & info on avail.services	personal services preferred; study guides & hands-on specimens on aspects of the Forest that relate to the current curriculum needed (at minimum: targeted self-guiding material)	facilities for "outdoor recreation" incl. longer loops for winter skiing; fireplaces, warm-up huts	controlled access & use; vandalism protection and trail surfacing/bridging to minimize env. damage	sufficient size & scope to handle groups of 35+ pupils
2b. Other org. ed.groups	leaders' info. packet: maps of signficant areas & guide related to goals	as above; information on complementary activities & best spots for pursuit	trails of varying lengths, with appropriate interpretive signage	as above; non-personal, so trailhead panels/maps needed to orient re: rec	as above; non-personal, so only issue permits to users with an env. ethic	groups tend to be smaller; Scouts need designated area where can cut brush/shelter
3a. Trail users: winter	corrected version, RMOCs existing Forest map/info	map/info where R. Trail meets Roger Stevens Dr.	info on other winter users, particularly the location of snowmobile trails, so can avoid	seeking fresh air, peace and quiet: avoid crowds	re-align trails to avoid deeryards, etc; trackset	parking/trailhead map: zone to separate conflicting grp
b. " " non-winter	as above + hunt warnings	as above + wet-spots map	info on wildlife, location of hunt-free zone	wildlife-observation opp	as above, esp. wet spots	as above; ID loops/boundary
4. Nature observers	basic info + int. themes as they relate to season	on-site orientation to resource base & programs	personal services allow hands-on activities, higher quality program; interpretive signage	trails & boardwalks that access variety habitats	manage for sustainable use of interp. resources	trail maintenance, better road access/stopover points
5. Picnickers, day-users	basic info (e.g. potable water/time of operation)	trailhead panel: looped to allow a short ramble	basic interpretive messages, info. about the facilities/programs so can participate later	open area; multi-purpose recreational uses nearby	signage to discourage plant trampling, picking	provision & maintenance of basics: washrooms, tables
6a. Powered trail users: snowmobile	info re: acceptability, this rec. use of Forest	orientation re: parking, trails, clubs, shelters	no interpretive requirements; RMOC may wish to append corporate message to orient. info	outdoor recreation/speed (in conflict with skier)	access to entire Forest, so hard to protect deer	Recreation Plan should designate trails or zones
b. ATV	policy re: use (zoned?)	ID of restricted areas	as above	wildlife observ. not #1	destroy cedar roots, etc	as above
c. horseback	availability, proximity	map of routes/boundaries	as above, adding an overview of int. themes	less conflict than above	hooves trample plantlife	as above

2.3. DEVELOPMENT OPTIONS

In this section, Interpretive **facilities** are proposed, where they help to **foster public access** to significant or representative examples of our natural, cultural or scientific heritage. **Programs** using a variety of media (in the case of the Forest, all of them "self-guiding") are suggested where they can cost-effectively **enhance awareness, understanding and enjoyment** of the richness of that heritage. Both basic upgrades and optimal levels of facility and program development are presented. The three sectors of the Marlborough Forest that educational groups and nature observers will find the most accessible and interesting are treated: Cedar Grove Trail, the Paden Road Sector (including a spur to the Gilroy Farm) and the Flood Road Alvar-Stevens Creek headwaters (referred to in the Concept as the "Limestone Plain Study Area").

Care has been taken to pinpoint all major Interpretive resources, so that existing or potential trails to the most significant features can be flagged for upgrading or priorized development. The Other Sites category flags the Schoolhouse heritage sector as a future cooperative development option, whereas the poorly accessible Central Forest Sector and its alternates are to be held in reserve, pending demonstration of greater demand. The Action Plans provide further details on the costing of proposed options, and 1:10,000 maps of the specific resources and Concept facilities.

2.3. DEVELOPMENT OPTIONS: CEDAR GROVE TRAIL

The Cedar Grove Trail already has an equipped trailhead along Roger Stevens Drive, with parking for a dozen vehicles, toilets, picnic tables and a large sign naming, but not mapping, the Walking Trail. Much of the trail is defined on the ground by wood-chip surfacing. Significant interpretive resources include:

- the only spot where Forest visitors can readily see a multi-layered exposure of Beekmantown dolomitic limestone, with the durable, darker dolomite overlying chalkier lenses of limestone;

- specimens of the interesting, lime-loving and thematically-appropriate walking fern, plus cedars rooted stubbornly in the tiny crevices between dolomitic and limestone layers, precariously sending their trunks skywards after a right-angled bend;

- typical Limestone Plain waterfowl such as early-spring-nesting pied-billed grebes, with their unusual, far-reaching mating calls;

- huge beaver lodge and readily-viewable cutting/damming activity, right next to the dam/weir complex completed by Ducks Unlimited;

- plantations of different conifer species showing varying success (pine galls; Scots vs. jack pine vs. cedar for challenging sites).

Proposed development options: Minimal Upgrade

raise existing trailhead facilities to minimal standards by adding orientation information (length, routing of walking/Rideau trails, location of seasonally-flooded areas, hunter/hiker safety warning);

make a portion of the circuit self-guiding (details: Action Plan);

ensure tables/washroom facilities are open/maintained year-round.

Major Enhancement

reroute the flooded-out portion and improve the bridging around the seasonally-wet southern and eastern edges of the DU pond;

investigate providing a potable water supply at the picnic area and/or Rideau trail shelter; improve the aesthetics of viewpoints;

after assessing visitor satisfaction/use of self-guiding portion, consider installing vandal-resistant panels carrying corporate and interpretive theme-related messages; negotiate hunting zone limits, re-assess the access road gateway (secondary trailhead facilities?)

2.3. DEVELOPMENT OPTIONS: LIMESTONE PLAIN STUDY AREA

The Limestone Plain Study Area can be accessed year-round from a parking lot on Roger Stevens Drive, hiking southward for 20 minutes along the Forest access road. In summer, four-wheel drive vehicles can proceed at least as far as the Concession line, 5 minutes' walk from the proposed bivouac point. The Rideau Trail traverses the sector, as do a confusing array of blazed hunting trails and ATV tracks. The planners recommend that the Rideau Trail be re-routed past Stevens Creek using the Ducks Unlimited dyke. A field trip with the planning team leader and an Association member identified route options and pointed out the necessity of clear markings to prevent groups from becoming lost in this sector; flagging and other trailwork by MNR 1990 summer crews is tentatively arranged.

Although the log farmhouse and outbuildings are not in their original configuration (the former has been moved, restored and adapted for hunt club use, while many of the latter are in a dangerous state of disrepair), the Paxie/Brisson property offers a concrete reminder of the challenges that faced the original subsistence farmers of this swampy, rocky Limestone Plain. Other interpretable features in the vicinity include:

- a mini-fen, suitable for introducing these sedge-mat wetlands;

- a beaver-altered wetland contrasting to a nearby DU-managed one;

- a large alvar community with many rare and interesting plants;

- relics of man's use of the area, including a piston-style pump;

- burnt-out stumps, reminders of the Carleton County Fire of 1870;

- ANSI-nominated habitat (mature cedars dominate; few sugar maples)

Proposed development options:

- leaders' field trip kit, including write-ups and illustrations of resources related to "Life on the Limestone Plain" sub-themes and a detailed map showing the accepted Rideau Trail re-routing, the Forest access road parking lot and Cedar Grove Walking Trail;

- no trespassing/warning signage re: hunt-club-leased homestead and outbuildings (eventually, remove or restore sagging roofs); new Rideau Trail triangular markings on Stevens Creek DU by-pass (eventually, toilets, fire-pit, rechinking of out-building near white pine plantation so this can become a group bivouac point).

2.3. DEVELOPMENT OPTIONS: PADEN ROAD SECTOR

This sector is accessible year-round via trails leading north from the Paden Road, but note that many of the interpretable features are south of the NEA boundary (flagged for Management Review). At present, there is no parking lot; roadside fields (winter) and two abandoned quarries further north, near the NEA boundary (costlier to develop, but good year-round) could be adapted to this purpose.

Interpretable elements related to Integrated Resource Management sub-themes include:

- use of larch (native/Japanese/European); plantation alternatives;

- pre-commercial thinning/underplanting, wildlife field management;

- significant plant habitats: forest, field & lichen/cedar barrens;

- DU Projects draining north (Sand Hills) & south (Lower Brassils);

- nearby heritage farms - Gilroy, Thompson - options for management

Proposed development options:

- develop Paden Rd. field or rehabilitated 2nd Quarry as trailhead; flag a connecting trail spur from Rideau Trail to poplar grove at north end of existing access road (boundary of red maple/barrens); add self-guiding interpretation (media details are in Action Plan);

- promote with R. River Park/Burritt's Rapids cyclist/day-trippers and those attending personal programs at Baxter/Kemptville Nursery;

- interpret heritage Gilroy Farm as example of joint MNR/volunteer feature-specific management; explore sources for protection funds and interpretive development options (with the caution that NCC's Log Farm living history program must now be operated by volunteers and despite charitable non-profit status, is in precarious shape).

2.3. DEVELOPMENT OPTIONS: OTHER SITES

There are many other sites that could be included in this Plan. Some, like the Richmond Fen, are best left to the keen naturalist groups, who will continue to access them via their traditional rights-of-way, visiting in limited numbers and seasons, in ways unlikely to damage resources discovered to be of inestimable value. Then, there are the other sites that rated of good-to-excellent interpretive potential, including the following Table listings:

- the Central Forest sector (too expensive to develop for the present, but see the last section in the Interpretive Resources analysis, Appendix 1, for details of its significant resources);

- two other lower-ranked alternatives: the West central forest and the NW Forest/Hydro/CNR (details of their resources are found in the Life Science Inventories under the Compartment headings noted)

- the Schoolhouse sector: an aesthetically-pleasing compartment outside the NEA and separated from the rest of the Forest by private land (occasionally used by Rideau Trail cross-country skiers or those exploring its quiet country lane; its adjoining farmland is mostly used for pasturing cattle); the area is flagged for the Recreation planners (visitor destination point: parking and picnic area); it would make an ideal setting for nature walks, too.

After discussions with the planning review committee, the team was asked to investigate one additional alternative along the paved Roger Stevens highway, suitable for development as a "nature trail" for the general public. The choice was an easy one: a sector of good bird and plant species diversity, rated of at least fair interpretive value (No. 1/2 of Lots 22/23-Conc. 5 or Comp. 71/2).

On further investigation, the area proved to be easily developable: existing walkable trails lead out from a gravel extraction area (now limestone pavement) that could be ramped and used for parking. Part of the large Stevens Creek deer yard, it has stands of natural and plantation forests that are very representative of those found throughout the Natural Environment Area, and a mix of wildflowers (spring trilliums, summer orchids, fall asters) to delight the eye.

Because self-guiding media have to have some interpretive "hook", to capture the interest of visitors, and encourage them to observe other, on-the-spot features, Forest Management has been chosen as the theme of this trail (for further details, see the Action Plan).

2.4. ACTION PLANS

Self-guiding Pamphlet, Cedar Grove Trail

Priority, Scope & Responsibility: Written as a close-out assignment by a 1990 student, this pamphlet could be desktop publishable (MNR or a suitable contractor), with black-line illustrations and a set of numbered, bilingual descriptions keyed to markers in the field. If the brochure also contained a large fold-out trail map, adapted from the one on the following page, the trailhead sign would not need elaborate graphics and could be patterned on standard designs.

Research: Suggested stops are presented on the map. Most of the information needed to flesh out this material is gleanable from the Interpretive Resource analysis, Appendix 1. Pine galls (stop 8) need to be investigated with MNR foresters. Susan Laurie-Bourque, 159 St. Etienne, Apt. 3, Hull, Qc., J8X 1K7 at telephone 776-1285, is recommended as a highly experienced natural science illustrator.

Phasing & Cost Estimate: Given the above task assignment in 1990/91 a 1991/92 expenditure of $5,000 should cover the French and English editing, illustration and desktop publishing of a modest pamphlet.

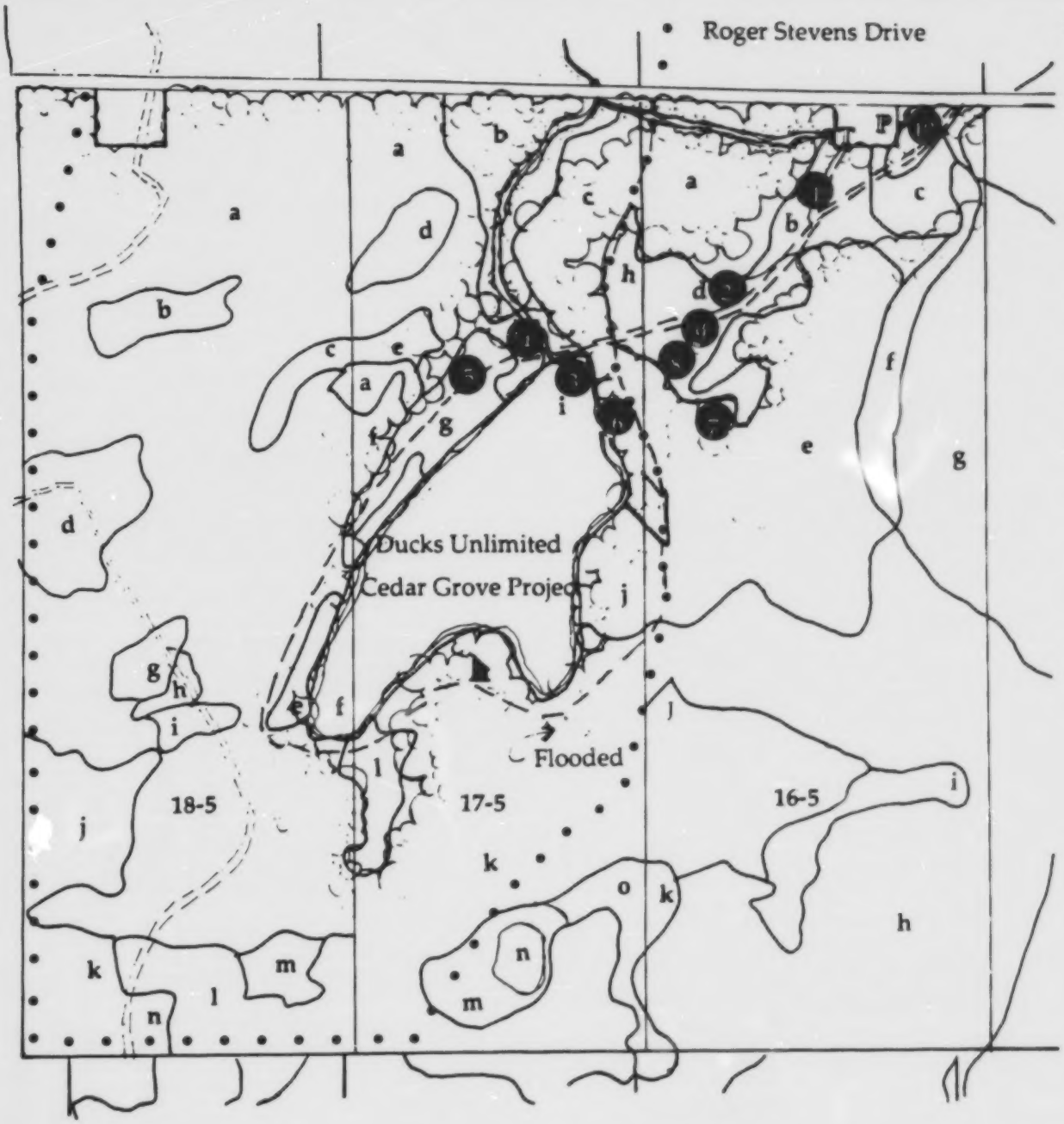
1992; trailhead sign/brochure box (design fees not required): $2000
interpretive ID markers, minor trailwork (Stops 8/9): $2500

Upgrade of winter loop: rerouting at $4,000; 3-4 bridges at $12,000
Optional design/production: trail-side interpretive panels: $14,000

Budget for basic development: $9,500; all options (1990-5): $39,500

Justification & Implications: As the main "window" on Marlborough Forest for passers-by, Cedar Grove Walking Trail should attain a minimal standard for visitor use, providing clear orientation to the facility and the Natural Environment Area of which it is part. If use warrants, vandal-resistant panels are a desirable upgrade.

As long as pamphlets are the chosen medium, brochure boxes have to be checked (i.e. monthly) and supplies kept in stock (re-order well ahead of time to ensure adequate quantities are in hand). Once the trailwork is done, maintenance standards must become more rigorous. To make this development worthwhile, all visitor facilities (privy toilets included) should be kept open year-round. At a minimum, these developments imply several extra person-weeks of O&M work.



LEGEND

Compartment	23-2
Sub-Compartment	n
Rideau Trail	• •
Unimproved Road	= = =
Existing Trail	– – –
Proposed Trail Link	▬
Proposed Trail Head	T
Proposed Parking	P

SCALE: 1:10000

0m 100m 200m

RESOURCE LEGEND

1. Natural Forest Management
2. Tracks Along The Track
3. Beaver Activity
4. Managed Wetland
5. Wildlife Field
6. Rideau Trail
7. Gravel Ridges
8. Plantation Management
9. Planted Cedars
10. Limestone Cliff

Marlborough Forest Interpretation Plan

Cedar Grove Trail

2.4. ACTION PLANS

Leaders' Field Trip Kit, Limestone Plain Study Area

Priority, Scope & Responsibility: This top priority project is needed to address severe gaps in the visitor service offer. The media are self-guiding. Use could be promoted by referrals (e.g. educational groups attending programs at Baxter or Kemptville).

Research: Initial research would involve showing the pertinent sections of this Plan to Scouters, members of the educational community, etc. The process should allow for a draft leaders' field trip kit responsive to group needs and expectations, to be field-tested, prior to moving into full-scale edukit production.

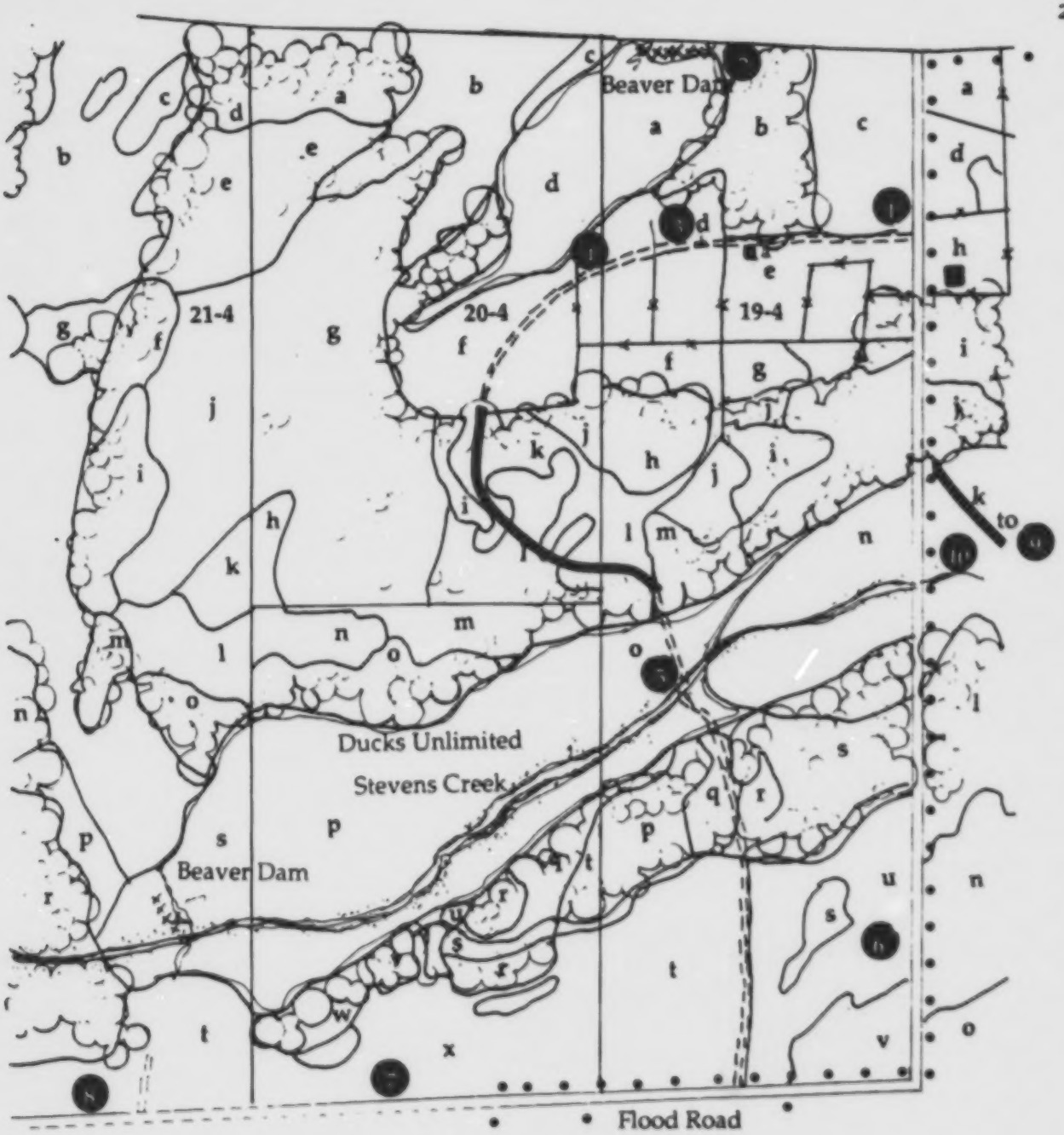
Phasing & Cost Estimate: Given the above, 1991/2 expenditures of $7,500 should cover the preparation of bilingual educational materials targeting the major clients contacted in the research phase. Copies could be distributed, at cost, to the interested parties, or alternatively, kits could be bulk-produced and mailed to group leaders at the time of booking ($500/yr. assuming a unit price of $5 and group demand rising to a ceiling of 100 a year).

Drive shed repairs (to turn it into serviceable shelter): $7,500.
Trailhead sign/box, picnic table, privy toilet, firepit: $6,500.

Optional development: 10 interpretive resources markers: $2,000.
demolish or stabilize outbuildings: $8,000.
upgrade forest access road to site: $7,500.
road signage/trailhead parking lot: $7,500.

Budget for basic development: $22,000; all options-1996: $47,000.

Justification & Implications: As the sector of highest potential for communicating the major Interpretive theme for Marlborough Forest, the Limestone Plain Study Area warrants priority action. Moreover, educational groups are underserved by existing visitor media and could easily get lost without better maps and flagged trails to resources of interest. It falls within MNR's mandate to undertake projects that will enhance visitors' understanding of the Smiths Falls Limestone Plain, and this is a cost-effective means of ensuring that thousands of enquiring minds are provided "opportunities for the exploration and appreciation" of same. MNR staff would need a few person-days each season to book groups and send out kits. Maintenance crews would have to check litter, etc.



LEGEND

Compartment	22-2
Sub-Compartment	m
Rideau Trail	• •
Unimproved Road	====
Fence	-o-o-
Proposed Trail Link	▬
Proposed Trail Head	T
Proposed Parking	P

SCALE: 1:10000

0m 100m 200m

RESOURCE LEGEND

1. Subsistence Farms
2. Flooded Fields
3. Forestry
4. Wetland Overlook
5. Ducks Unlimited Project
6. Jack Pine Plantation vs. Alvar Plants
7. Piston Style Pump
8. Mini Fen
9. Tolerant Hardwood Forest
10. Stevens Creek

Marlborough Forest Interpretation Plan

Limestone Plain Study Area

2.4. ACTION PLANS

Resource Management Interpretation, Paden Road Sector

Priority, Scope & Responsibility: The planning team recommends that self-guiding interpretive media that will create a second "window" on the Forest, from an all-season road, be developed during the 1991/2 fiscal year. Two alternatives are presented: both help interpret the second major theme for the Forest: the Integrated Resource Management techniques practised here by MNR.

Research: A connecting spur looping back from the Rideau Trail portion to the poplar grove at the north end of the existing lane needs to be field-checked, flagged and brushed (try following the red maple/cedar stand boundary). Brassil's Creek bridge repair was recommended to the Rideau Trail/MNR Summer 1990 work crew. The balance of the research work is interpretive: writers can refer to the appropriate section of this Plan (Resource Summary); illustrators can refer to slides taken during the Life Science Inventories, those by D. Cuddy (MNR Kemptville) and Lorna McCrea.

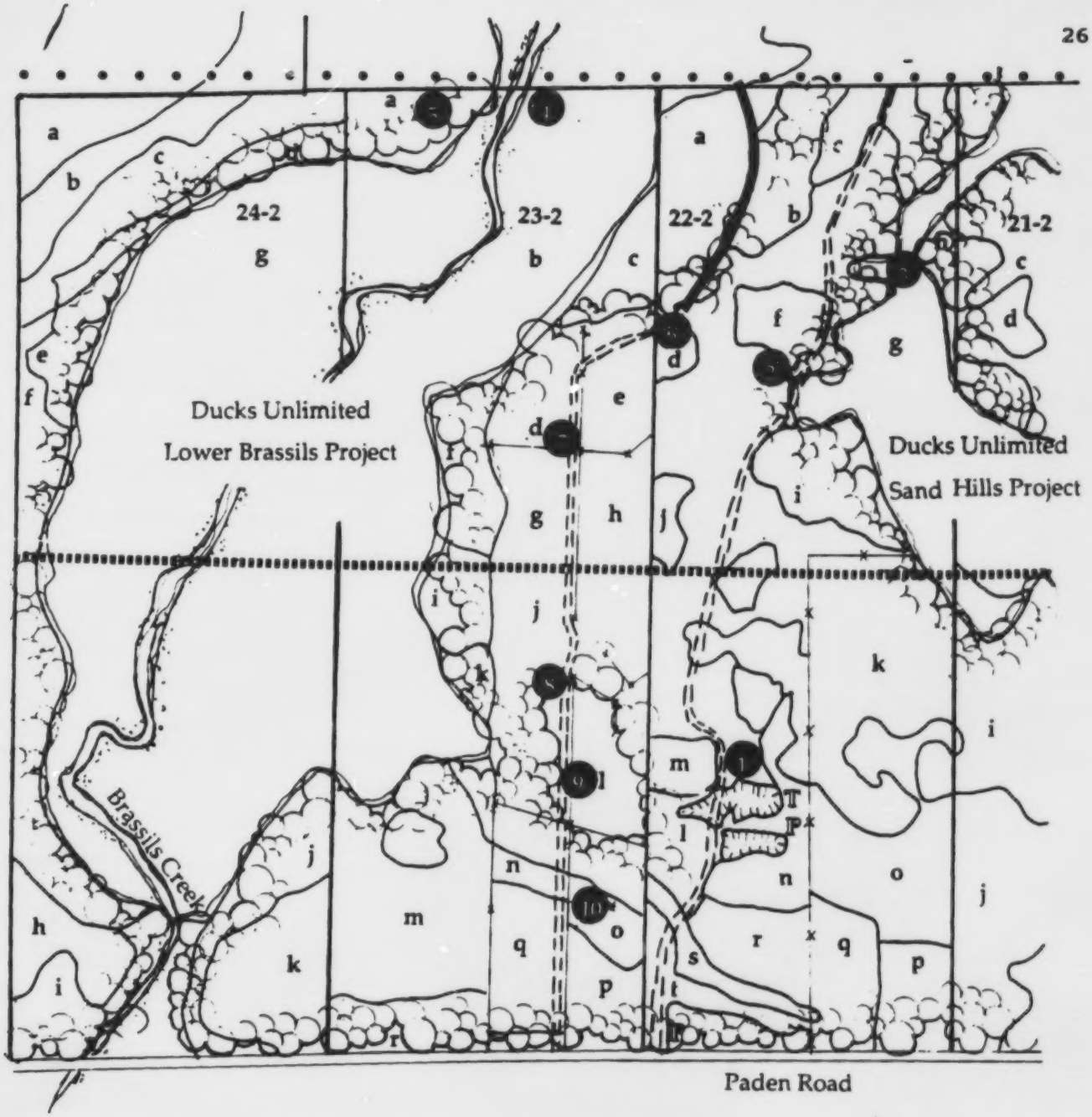
Phasing & Cost Estimate: Work recommended for 1991-3: **$20,000.**

- create temporary parking lot in a field off Paden Road **$3,000;**
- temporary trailhead orientation sign with brochure box **$2,000;**
- Paden Road signage **$2,000;**
- privy toilet **$3,000;**
- proposed new trail link (approx. 100 m.) **$2,000;**
- interpretive resources ID markers **$2,000;**
- desktop-published, bilingual, illustrated trail guide **$6,000;**

Recommended (pending Recreation Plan, snowmobiler consultations)

- prepare permanent trailhead/quarry parking lot, culvert **$6,500.**
- rehabilitate quarry site; add picnic shelter, lookout **$20,000.**
- carry out Brassil's Creek bridge repairs (if not done by Summer '90 MNR crew); add bike/ski racks, trailwork **$10,000.**

Justification & Implications: The basic proposal can be justified as a cost-effective means of communicating the second major theme for the Forest, in a spot that is handier to visitors approaching from boating-season tourist nodes along the Rideau (Merrickville, Burritt's Rapids to west; Kemptville, Rideau River Park in east). The enhancement promises to promote recreation/interpretation in the sector by providing a year-round visitor destination point.



LEGEND

Compartment	24-2
Sub-Compartment	m
Rideau Trail	• •
Unimproved Road	= = = =
Fence	-x-x-
M. Forest Boundary	▪▪▪▪▪▪▪▪
Quarry	
Proposed Trail Link	
Proposed Trail Head	T
Proposed Parking	P

RESOURCE LEGEND

1. Integrated Resource Management in this NEA
2. Wetlands and Cedar Barrens
3. Man and Beaver
4. Draining South/Draining North
5. Feature- Specific Management
6. Poplar Groves
7. Old-Field Plantations
8. Plantation Tending
9. Wildlife Field
10. Foresters' Challenge

SCALE: 1:10000

0m 100m 200m

Marlborough Forest Interpretation Plan

Paden Road Sector

2.4. ACTION PLANS

Alternatives: Roger Stevens Forest Management Trail

Priority, Scope & Responsibility: This nature trail for the driving public, off Roger Stevens Drive, has been costed at the request of the steering committee, but it is not recommended as a priority.

Research: Ten tentative "stops" have been identified, but a routing linking these would have to be field-checked, flagged and brushed. This is a walkable upland trail so no wetland bridging is required.

Phasing & Cost Estimate: Because there is a limestone-pavement area adjacent to the road (suitable as an extra-large parking lot), trailhead development costs shouldn't be onerous. Providing road signage, a culverted ramp off Roger Stevens Drive, a standard trailhead sign with brochure box, privy toilets and a rehabilited quarry wall would cost about $18,000; trail brushing/alignment and interpretive resource markers, plus the self-guiding pamphlet would add $10,000; half a dozen picnic tables would come to $6,000 more.

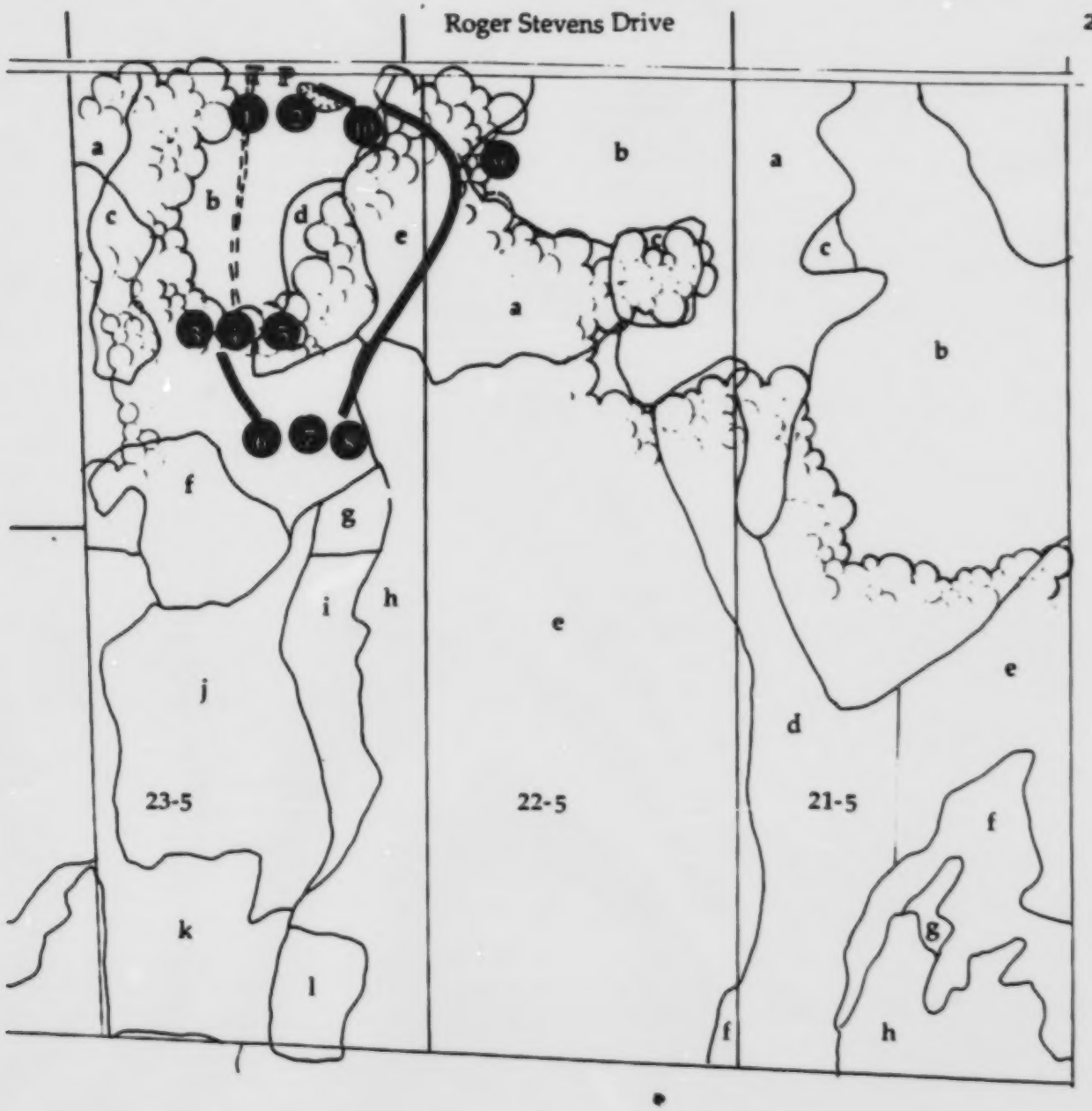
Estimated cost should the Recreation Plan favor this site: $34,000.

Justification & Implications: This project is hard to justify on purely interpretive grounds. The site is representative, and if visited in the various seasons, offers a diversity of resources for the nature observer. However, its Forest Management message can be just as readily communicated in the Paden Road sector, and as funding is a constraint, development would best be focussed there. The Recreation Plan should determine if there is a need for another day-use site, along Roger Stevens Drive, and compare this area to the Schoolhouse sector (a smaller parcel outside the NEA boundary).

CONCLUSION

Cost: interpretive media, related concept development, all sectors

Recommended as basic: $51,500. Future-options package: $157,000.



LEGEND

Compartment	21-2
Sub-Compartment	m
Rideau Trail	• •
Unimproved Road	= = = = =
Quarry	
Proposed Trail Link	
Proposed Trail Head	T
Proposed Parking	P

SCALE: 1:10000

0m 100m 200m

RESOURCE LEGEND

1. Forest Management on The Limestone Plain
2. Plantation Species
3. Shade Lovers
4. Fuelwood Cut
5. Abondoned Clearing
6. Layered Limestone Edge
7. Lichen Barrens & Protection Forests
8. Modified Forestry, bordering wetland
9. Jack Pine Plantation
10. Integrated Resource Management Plan

Marlborough Forest Interpretation Plan

Roger Stevens Forest Management Trail

3. ISSUES FLAGGED FOR MANAGEMENT/ADVISORY COMMITTEE REVIEW

3.1. FOREST USER CONCERNS

Hunter/hiker Safety Measures

Snowmobilers, hunters and, to a lesser extent, naturalists, cross-country skiers and Rideau Trail hikers are currently the main users of the Marlborough Forest. There is a need to identify zones and institute safety measures so that each of these user groups can continue to benefit from their chosen recreational pursuits.

During the Interpretation planning exercise, RMOC and MNR began the process of sensitizing these user groups to each others' needs, rights and responsibilities. In the absence of the ideal (funding for ongoing, personal presentations to safety-education classes, hunting and snowmobile clubs), two non-personal approaches could be adopted, to carry on with this objective:

- suitably captioned illustrations/photos depicting the legitimate recreational uses of the Forest could be used to illustrate all RMOC maps, publications and displays about the Natural Environment Area; they would also figure prominently in on-site interpretation.

- zoning could help separate hunters and hikers in time or space.

(Even in April/May, shots are routinely heard on both weekdays and Saturdays, especially in the Paden Road sector. This suggests use of the area for "varmint" and predator hunting (groundhog/coyote), target practice and perhaps poaching, some no doubt occurring in the Forest proper and, like "cedar rustling", impossible to control over so wide an area).

For example, if the area east of the logging road and south of Roger Stevens Drive, in the vicinity of Cedar Grove Walking Trail, were to be posted "no hunting", this exclusion (only 2.5% of the publicly-owned NEA land) would significantly enhance walkers' sense of security. (It is most alarming to find a discarded casing listing a projectile's range as 1.25 miles!) Compliance would be optimized by ensuring that such changes arose from the active consultation and cooperative input of the groups involved: part of a Master Plan exercise, steered by the Forest's Advisory Committee.

3.1. FOREST USER CONCERNS (Cont'd)

As an alternative to outright bans, signs could warn about deer season (1 week in early November) or the likelihood of encountering duck hunters (early-in-the-day, mid-September on, except Sundays). A Rideau Trail causeway across the privately-owned Wall DU Project is posted in several spots with: "For your own safety and others', no shooting from or near the roadway, please". These signs haven't been vandalized; the extent of compliance is not known, but could be gleaned from hunter groups and/or monitored during the fall.

The Master Plan should further assist RMOC/MNR in defining, and then making people aware of, current issues and concerns affecting the Natural Environment Area, specifically, changing public needs and perceptions about the Forest. Hopefully this sensitization will also help temper the climate of conflict that so easily arises between these various user groups.

Security of existing/planned facilities

The only major facilities on-site at present are the two huge Cedar Grove Walking Trail signs, picnic tables and washrooms, plus the logging road "Use at your own Risk" trailhead signs and roadside Marlborough Forest signs. None of those visited appear to have been vandalized, but the smaller international signs for "no motorized vehicles" are regularly used for target practice.

Trailhead brochure boxes containing self-guiding interpretive media and/or trail routing maps would need to be constructed of vandal-resistant materials, and frequently replenished (a 1/mo. schedule).

For sites off the beaten track, a leaders' kit could be mailed out to educational groups on request. MNR staff would have to identify a contact person to be held accountable for group behavior. Clear, written guidelines should be provided and privileges revoked if a group is irresponsible in the use of fire, litter, washroom or day shelter facilities.

3.2 ADMINISTRATIVE ISSUES

Natural Environment Area Boundary

This Plan has identified Forest Interpretation Resources, outside the Natural Environment Area, that must be **retained in public ownership**, if the development concept is to go ahead. In most cases, the sites will remain accessible, as long as current land use is not altered (MNR is now actively managing land parcels and fire roads north of the Paden Road; the Rideau Trail Association does the same for Concession lines and permanently closed road allowances adjoining private land in the Wall DU Project and the Gilroy Farm sectors). A way should be found to rationalize the ownership of these and other recreational or ANSI-rated parcels (e.g. a land-swap with MNR, to include them in the RMOC's NEA).

Paxie/Brisson Farmstead

It is recommended that this year-round hunt camp lease be extended in the short and medium term, as the hunters involved are taking good care of the farmhouse and grounds. The goodwill so generated, and the security of having "caretakers" present in this sector, makes it a workable, worthwhile arrangement.

However, the area to the east of the Rideau Trail road must be posted (washrooms, unlocked house), while the outbuildings to the west are highly dangerous (need "Do not enter" signs, pending the removal or stabilization of sagging roofs). Rideau Trail members have been apprised of the Ducks Unlimited dyke, which could serve as a dry alternate to the Stevens Creek traverse (increased use).

The outbuilding on the westward trail is in fine shape, and would serve as an excellent bivouac point for Rideau Trail users and educational groups. Minor repairs (chinking), a proper firepit and toilets are needed; a potable water supply would be an enhancement.

3.2 ADMINISTRATIVE ISSUES (Cont'd)

Protection of Gilroy Farm

The LACAC has designated Gilroy Farm as a heritage site, and local historians are investigating the sigificance of this subsistence-level, Irish-Canadian farm. In addition to its unusual wooden livestock stalls and "corral" of outbuildings, the property has wonderful vistas overlooking the surrounding land (rare in the Forest). Like a similarly-designated heritage log building to the south (the Thompson Place), this Farm could be rented as a hunt camp, pending the availability of development funds. (Current MNR practise is to lease Forest buildings so as to reduce the risk of vandalism and fire, while keeping future options open). The Farm warrants more. Stakeholders sensitive to its heritage value should be sought and projects that go beyond simply stabilizing the ruins should be encouraged (e.g. a co-sponsored Heritage Homes tourbook).

3.3. CONCLUSIONS

The Marlborough Forest Advisory Committee should finalize the terms of reference for a follow-up Master Plan.

It is recommended that the Master Planning team begin by analyzing all of the recreational services now provided for Marlborough Forest visitors (groups as defined in Section 2.2 of this Plan).

Program strengths, weaknesses and opportunities can be assessed, using the planning framework adapted for the Regional Supply Study (refer to the Tables in Appendix 4.2 of this Plan).

Taking into account management concerns and resource constraints, comprehensive recommendations can be made, about such issues as:

- the image or market position of the Forest vis-à-vis recreation, including strategies for changing public perceptions, if necessary;

- the type and degree of recreational facility development suited to Natural Environment Areas (particularly Marlborough Forest);

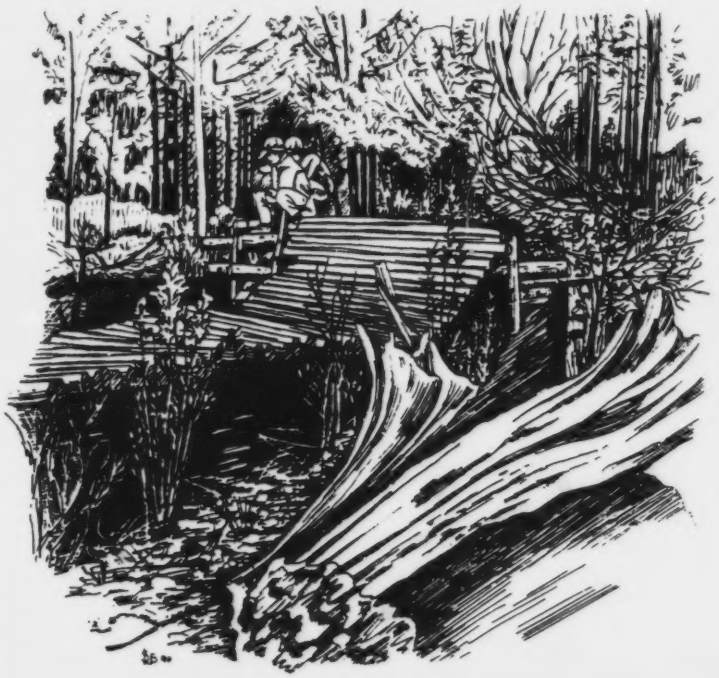
- ways of addressing the as-yet unmet needs of horse-back riders, trailbike/ATV enthusiasts, picnickers and other casual day-users; (like the interpretive clientele, these are visitor groups whose numbers are expected to increase in the near future);

- a master-plan zoning, identifying the sectors where various recreational uses may predominate, so that accomodations may be made and made known (this would begin with, but not be limited to, separation of the conflicting high impact/low impact current uses).

MARLBOROUGH FOREST

INTERPRETATION PLAN

4. APPENDICES



4.1. INTERPRETIVE RESOURCES

4.2. REGIONAL SUPPLY OF INTERPRETIVE SERVICES

Lorna McCrea Consulting
Nature & Heritage Interpretation

4.3. REGIONAL DEMAND FOR INTERPRETIVE SERVICES

P. G. Whiting & Associates
Economic & Resource Consultants

MARLBOROUGH FOREST INTERPRETATION PLAN: INTERPRETIVE RESOURCES

Introduction: Challenges Relating to the Forest's Changing Role

At 12,200 hectares, the Marlborough Forest is the largest **Natural Environment Area** in the Regional Municipality of Ottawa-Carleton. It is significant as a conservation zone in which the features typical of the Smiths Falls limestone plain can be protected. In addition, the Forest's northeastern sector encompasses 2/3 of the provincially-significant Class I Wetland known as the Richmond Fen. Further to the south is a second area nominated for designation as an **Area of Natural and Scientific Interest** (ANSI): an important deer yard and bird-breeding habitat harbouring provincially-rare plants and the headwaters of Stevens Creek. Its 2,500 ha. are also mostly within the NEA, forming a continuous tract of swamps and mature woods, plus locally-significant fens and alvar-like clearings.

Altogether, the publicly-owned parcels within the Natural Environment Area now consist of some 7,700 hectares. They are managed under agreement with Ontario's Ministry of Natural Resources, from MNR's Carleton Place District Office, the third-largest such parcel in Ontario. The remaining 40% is held by private land owners. Only a few of these small, isolated parcels are actively farmed (pasturing cattle, tending bees). Because of the development restrictions now in force, most are being kept as investment properties. Several are managed by MNR under the Woodlands Improvement Act. Those private lands not being logged for timber or fuelwood provide opportunities for hunting, snowmobiling and outdoor recreation. The RMOC will purchase NEA lots if approached by a landowner willing to sell.

In the future, demands from recreational users will increase as suburbanites move into the rural townships. (Of the 100,000 increase projected for Ottawa-Carleton in the next decade, a large proportion will occur in the Barrhaven area, just north of Marlborough Forest. The recreational mix in the Forest will no doubt shift away from the traditionally rural-based forms (winter snowmobiling, hunting) towards cross-country skiing, fall hiking and nature observation. Formal and informal educational use will also likely increase, and careful planning will be needed to mediate all of these potentially-conflicting uses.

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1. Life on the Limestone Plain

The resources needed to interpret this generalized theme are found on the Cedar Grove Walking Trail and nearby Limestone Plain Study Area (defined as a sector running south along the Rideau Trail, to the abandoned Paxie/Brisson homestead and Flood Road alvar/fen habitats).

1.1. Rocky, Limy and Wet

The Marlborough Forest sits on infertile, agriculturally-marginal terrain. Droughty, shallow-soiled "upland" areas generally consist of a Beekmantown limestone pavement, overlain by a meter or two of glacial till and/or reworked gravel moraines.These are broken up and separated by extensive, poorly-drained lowlands with orgranic, muck soils.

Consequently, most of the farms started in this area after its initial survey in 1791, by Monsieur de Pincer, were of the "subsistence" type: a few head of cattle, horses, pigs, sheep and poultry, the biggest cash crop coming from winter lumbering.

The best example of its type, the heritage-designated Gilroy Farm, is on public land along the Rideau Trail. Unfortunately, it is outside the designated NEA, on Lot 28 of Concession 2.

The Paxie/Brisson farmstead, although too much altered to warrant heritage status, remains the more accessible example of the small farms that once dotted the Forest. The farmhouse is currently leased to private individuals as a hunting camp, while most of the barns require considerable repair if they were to serve as a group shelter. However, one outbuilding has been flagged as a potential bivouac point for guided educational groups.

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1.1. Rocky, Limy and Wet (Cont'd)

One former field is leased to a local bee-tender (Lot 19/Conc. 4 or Comp. 87d north,) while MNR has planted other abandoned pasture-land to jack pine and cedar (Lot 18/Conc. 4; Comp. 86h).

The remaining fields are slowly reverting to early-successional forest (red osier dogwood, common juniper, cedar and aspen) or are remaining open. Those that are very wet are being rapidly invaded by cattails. The more drought-prone fields harbour rare, alvar-type plants. This sector also bears ample evidence of the devastating forest fire that swept much of the Region in 1870 (burnt-out stumps are identified in the Life Science inventories in Lots 18 & 20/Conc. 4, Comp. 85j and 90j/k).

Outcrops of lower Ordovician Beekmantown dolomitic limestone are also more noticeable here than elsewhere in the Forest, where the landscape is almost entirely without relief. The best example, showing both the harder, blue-grey dolomite and the chalkier, lighter limestone lenses is the cliff at Cedar Grove picnic site.

This almost fissure-less outcrop is the only documented Forest location for the unusual walking fern, Camptosorus rhizophyllus. A lime-lover able to take one step per year, its long, tapering fronds "walk" from one crevice to another, taking root, growing a new plant and thereby colonizing this most demanding habitat.

Outcrops are found in 20/21-4 (Comp. 90c) where there is a 2-3 m. change in elevation and fossils were reported in 18-4 (Comp. 86d just north of the Paxie/Brisson homestead). The site was not inventoried in the 1988 Life Science study, merely listed in the summary, and this team could only find rock piles, no outcrops, so this fossil occurrence is yet to be verified. The only other identified fossil site (gastropods in dolomitic limestone, RMOC Site 139) is on private property, Lot 24/Conc.5, alongside Roger Stevens Dr. The Limestone Plain is the most extensive formation of its kind in southern Ontario but isn't prime fossil territory.

1.2. The Fragile Fen Habitat

Fens are permanently-flooded, open wetlands with deep, dark-brown peat substrates and cooler microclimates. Some 2/3 of their plants normally have a more northern distribution. They develop when a floating root-mat of narrow-leaved sedges extends out across open, still water. Slow drainage continues beneath a thick layer of peat, formed from the build-up, over many seasons, of only partially-decomposed plant material.

Unlike the fens in Gatineau Park and along the outer edges of Mer Bleue, which are naturally succeeding into highly acidic peat bogs, the limestone plain fens remain calcareous in nature. Their mosses are unusual "calciphiles" or lime-lovers and, since the pH rarely ranges below 6.5, the flora, on the whole, is more diverse here than in other, unbuffered (e.g. C. Shield) wetlands.

The fen identified in the Flood Road study area is located along the road, Lot 21 south, Conc. 4 (Comp. 91j). It is a poor cousin to the two other calcareous fens in the RMOC (Long Swamp fen at the headwaters of Cody Creek and a lake-edge fen on Mud Pond, near Constance Lake). And all three are much smaller than the Richmond-Phragmites Fen ANSI.

However, it offers an introduction to many fen plants, in a study area having a diversity of nearby wetland and upland habitats, for comparison purposes. Once introduced to the habitat and sensitized to its fragility, the keener students might then be encouraged to visit the more extensive Phragmites Fen (southern portion, as per Resource Map), to learn to identify a wider range of fen species.

(The late-fall 1985 survey of the Flood Road fen recorded only 20 fen-type species, nowhere near the diversity of the other regional sites at 48, 52 and 62 species respectively; of the rare or uncommon fen plants, only 10 were inventoried here, again, much fewer than the 30, 27 and 35 of its competitors).

1.2. The Fragile Fen Habitat (Cont'd)

However, flagging this tiny, open fen for interpretive purposes, alerts management to its potential (monitor DU project nearby). Students can be told that even the Richmond Fen is deteriorating, mainly due to beaver-damming of several railway culverts, which effectively prevents natural drainage from occurring along an 8 km. barrier. Cattails are pushing out rare plants. The effect on the yellow rails, spiders (including the first Canadian record for Goneatara nasuta) and other rare/fragile species is unknown.

This makes it all the more crucial that the Phragmites Fen, too, be held in reserve. It has been forming over a considerable length of time (witness its 2 m.-deep peat layer), and has no readily-dammed outlets. Although its narrow configuration makes it less suitable for breeding birds than Richmond Fen, this is balanced by its reduced susceptibility to degradation.

The south tip, handy to the Rideau Trail and a cross-forest access road, has been zoned for later low intensity interpretive development. If demand increases beyond more than the occasional field-naturalists' outing, a fen boardwalk will be needed to permit access while minimalizing trampling of fragile species.

The tiny Flood Road community provides an example of a sedge fen (often called a graminoid feb). A typical open meadow habitat, it features lime-loving mosses (Campyllium stellatum) and a sea of waving, knee-high greenery (marsh fern and the rare woolly sedge here; in Phragmites fen, the predominant ground cover is the common reed grass for which the fen was named: Phragmites communis). Significant plants already inventoried for the Flood Road fen are rush aster, narrow-leaved willow-herb, agglomerated muhlenbergia, bog bedstraw and such characteristic fen shrubs as the hoary and autumn willows.

1.2. The Fragile Fen Habitat (Cont'd)

In future, students should keep their eyes open for early summer orchids and such other Phragmites/Richmond Fen species as lead-coloured sedge, arrow grass, twig rush, Dyer's bedstraw and dwarf birch; more "boggy" species such as pitcher plant, round-leaved sundew, labrador tea, large and small cranberries, northern bog violet, bog rosemary, bog goldenrod and bog willow; or, in the treed fen-border, buckbean, 3-leaved false Solomon's seal, swamp honeysuckle and yellow water crowfoot.

Aesthetically, the Phragmites Fen is more impressive than its tiny Flood Road counterpart: truly, one of the Forest's special places. In spring, thousands of purple northern bog violets grace the fen floor, supplanted mid-summer by exquisite displays of rose pogonia and prairie white fringed orchid. Later appear the blue Kalm's lobelia blooms and white spirals of hooded ladies-tresses. Of special interest are plants typical of bogs in general (e.g. Scheuchzeria palustris, a sedge-like plant only known within the National Capital Region from here, Mer Bleue and a bog in Gatineau Park), or of calcareous fens in particular (e.g. the dominant moss, Campylium steltatum, and its rare usually-northern co-habitant, Cinclidium stygium, two lime-loving "calciphiles" found in the fen ANSI.)

Phragmites Fen holds much of interest for the entomologist as well (rare spiders, at least 9 regionally-rare butterflies, including the Appalachian-eyed brown, and many other less-studied insects, with flies being of particular biosystematic interest).

Reports of rare herptiles, birds and mammals suggest that the fen complex can and has supported several threatened species: yellow rails, least bitterns, short-billed marsh wrens, sedge wrens, yellow-spotted salamanders and lynx. Whether a phase II "window" on the fen is opened or not (Lot 15, Conc. 6/7 or Comp. 49Ab and adjoining 25), the general public should be made aware that this entire community is of inestimable scientific value for its rare flora and fauna.

1.3. Other Marlborough Wetlands

In addition to its calcareous fens, Marlborough Forest has several other types of wetlands, including treed swamps, beaver ponds, temporary ponds, lowland and stream-side marshes. However, large expanses of open water are fairly rare in the Forest. One of the area's first Ducks Unlimited dike/weir complexes, the Cedar Grove Project (1983), was designed to provide this type of habitat, thereby, it was hoped, increasing waterfowl populations.

A trail atop this earthwork dike offers nature observers a good overview of a managed wetland environment. Trail features include a shelter, a large beaver lodge, several wood-duck nesting boxes and a liftable footbridge. Deer may be seen browsing at the water's edge. Typical plant species are now frog's-bit, water horsetail, bladderwort and pondweed (Potamogeton spp.). Waterfowl species include regionally-significant pied-billed grebes and black terns.

A second Ducks Unlimited Project, Stevens Creek, can be viewed at the Flood Road end of the study area. Lots 21/22-Conc. 4 (Comp. 91i) has a duck-hunter's blind and inventories record mallards, wood ducks, American bitterns and blue-winged teal from this sector. An added advantage: the dike-top track provides a dry alternate crossing of Stevens Creek (the Rideau Trail traverse is usually flooded). For comparison purposes, there are several natural wetlands nearby. Together these form the headwaters of Stevens Creek, an area of sufficient biological significance to support nomination for ANSI designation.

Habitats include two active beaver ponds in Lot 19-Conc. 4: Life Science inventory Comp. 86c/i, where the regionally-sparse swamp sparrow is found, and Comp. 87a, with its rare black terns. In contrast to the typical black ash-willow-silver maple swamps, there is a flooded cedar forest in Lots 20/21-Conc. 4 (Comp. 90c) and a place where beaver activity is causing a swamp to encroach on the adjoining fields, in Lot 18-Conc. 4 (Comp. 85h).

1.3. Other Marlborough Wetlands (Cont'd)

Further south, beyond the Flood Road, in the winter-use section of the Rideau Trail and hence a little too far for easy access except on skis, is a second open fen. Located in Lot 19-Conc. 3 (Comp. 102a/103g) adjacent to several alvar-like dry areas, it has thickets of slender willow along its edge and a dominant sedge community of spike rush, green cotton-grass plus the first Forest records of regionally-rare Sartwell's sedge and Hudsonian clubrush (D. White, June, 1989).

Together, these habitats are interesting because they reveal how relatively subtle changes in wetness can significantly influence the wildlife species present. By way of illustration, Lots 20/21-Conc.4 (Comp. 90h) has dense cedar/fir and mixed deciduous stands interspersed with clearings and a number of wet low-lying areas; and additional areas of open water and marsh immediately adjoin these. The result: extremely high avifaunal diversity, with a record 45 species spotted in the 1988 Life Sciences inventory.

Again, Lot 21-Conc. 4 (Comp. 91j) is 2/3 abandoned field (some of it MNR-managed for wildlife), 1/3 young plantation, with the tiny Flood Road fen taking up part of its southern border and a swamp associated with the 1985 Ducks Unlimited Project, to the north. Not surprisingly, it too recorded very high diversity (40 bird species) during its May 16, 1988 Life Sciences inventory.

Birds are not the only interesting wetland fauna worthy of study. Amphibians are declining in many places across North America, perhaps due to pollution of the waters in which they reproduce and pass the early phases of their life cycle (at this critical juncture, wetlands experience a double blow: meltwaters carrying the winter's accumulation of toxins plus heavy springtime acid rain). Educational groups visiting this study area might wish to test this hypothesis, to see if this is occurring here.

1.3. **Other Marlborough Wetlands** (Cont'd)

Wetlands are also excellent breeding-grounds for a wide variety of insects. While these may be difficult for beginners to study, their predators aren't: avian flycatchers are well-represented here and the group is remarkable for its species-specific choice of nesting habitats. A June 1988 inventory of Lots 20/21-Conc. 4 (Comp. 91c) turned up 7 of 9 species known for the Forest, most along the edge of a field planted with cedar/jack pine or in the willow/balsam poplar shrubs:

- the least flycatcher, which prefers open groves and farmland north to James Bay, was recorded as common in this stand;

- the alder flycatcher, which prefers wet willow/alder thickets or brushy swamps near water; its close cousin, the willow flycatcher, is extending its range northwards into our region, but favors drier thickets and brushy, upland fields; both were found here, the alder being common, the willow uncommon in this stand, but common/possibly breeding in the adjoining Comp. 901 (a densely-wooded upland area, with damp clearings becoming dry in summer);

- the yellow-bellied flycatcher, a species of the boreal forest and cold northern bogs, has been recorded for the Forest (e.g. Lot 16-Conc. 7 or Comp. 48j); however, it was not found in this area of warmer microclimate, nor the olive-sided flycatcher, which prefers brushy slash or edges in coniferous forest (found along with 38 other bird species in Lot 23-Conc. 5/Comp. 71e);

- of the larger "tyrant" flycatchers, both the eastern kingbird and eastern phoebe prefer stream-side groves and road edges: they were found here, but rated as uncommon in the compartment;

- the great-crested flycatcher and eastern wood pewee, which tend to be found in hardwood forests, were both recorded as common.

Using birdsong tape-recordings, educational groups could track flycatchers in the field, to discover the ecological importance of wetlands (parameters might include microclimate, associated plant communities, wildife distribution and breeding habits).

1.4. The Alvar Community

Alvars are shallow-soiled meadows on limestone flats, kept open by summer drought and fire. The largest alvar east of Kingston is the Burnt Lands ANSI, on Hwy. 44, east of Almonte. Only 1/3 publicly-owned, these spring-flooded meadows on bare rock harbour about 40 typical plant species and some interesting butterflies, too: all surviving ground temperatures of up to 45 degrees C.

The Flood Road alvar on Lots 19/20-Conc. 3/4 (Comp. 88, 89, 101a, 103c; 1985 inventory) is not technically a "true alvar" because it evolved on meadows cleared for agriculture rather than through drought or fire. However, it now contains many of the rare plants typical of these harsh, hot, limy habitats, including the largest Ottawa-Carleton colony of mountain mint, plus whorled milkwort, Torrey's rush, bugleweed, red cedar, upland white aster, wiry panic grass, Kalm's brome grass, shrubby and tall cinquefoils.

In the past, some of these fields were planted to jack pine. But now that their botanical significance is known, MNR managers will be maintaining them in an open state by periodic mowing/brushing. Field study plots and interpretive panels alerting Forest users to the alvar's significance are a better option than leaving it unposted and subject to inadvertant damage. Even "unremarkable" community members have fascinating ecological or biogeographical stories to tell:

- the short flat-topped **upland white aster** has a range that is confined to these alvars but **mock pennyroyal** is a Prairie species found here at the Eastern limits of its range; and **Kalm's brome grass** hails from the natural grasslands of Carolinean Pt. Pelee;

- **wiry panic grass** has a range suggesting that it spread along the shorelines of the early glacial lakes (Algonquin, Iroquois);

- the **columbine** is a species that typifies sandy habitats; other species representative of the alvar community, but not restricted to it: **King Devil hawkweed, balsam ragwort, narrow-leaved willow-herb, poverty grass, blue-eyed grass** and **common St. John's wort.**

1.5. Coyote Country

Much of the Smiths Falls plain is characterized by dense cedar groves, interpersed with clearings and patches of mixed forest. Only rarely is there sufficient soil to support sugar maple, the climax species so common in nearby, more typical examples of the Great Lakes/St. Lawrence forest. Lot 17m-Conc. 4 (Comp. 87b) is a case in point: part of a diverse, woodlot, it has 60% eastern white cedar, some of which is very old, 40% basswood and white ash. There are also a few bitternut hickory and some very mature sugar maples. But as a mature forest, it is quite unlike that of Gatineau Park or similar natural areas in Ottawa-Carleton region.

The compartment has abundant ram's-head and yellow lady's-slipper orchids and, as expected for a mature forest, much evidence of pileated woodpecker activity (large oblong trunk-holes). Snowshoe hare and deer (tracks, scats and evidence of year-round yarding in the cedars and firs of nearby Comp. 90a) are also present. Not surprisingly, nearby Comp. 84a, 85o/q, 90a/c/d/h and 91c/e/g, contained scats and other signs of coyote. Known to interbreed with the local wild dogs, these larger-than-average livestock predators (up to 60 lbs.) are hunted year-round as "wolves". (The Forest's 5 licensed trappers earned $8,460 in 1988/9: 7 coyote skins vs. some 300 pelts each, for muskrat and beaver).

Avian predators are another component of the web of life in "Coyote Country". The clearings afford relatively easy hunting for the wide variety of small mammal prey. Here, the northern harriers (marsh hawks), great blue herons and osprey recorded for the wetland areas are supplanted by turkey vultures (Comp. 85c/h; 90b/c/h) and several kinds of hawk (red-tailed, sharp-shinned and rare northern goshawk, according to the Life Science inventory).

Finally, on the human interest side, there are many old homestead foundations, remnants of pioneer fences, pumps and the 1870 Fire (Comp. 90b/h) - reminders of the difficulty of eking out a living from the Limestone Plain. Small wonder that today the Forest is the preserve of the coyote, an equally wily, adaptable onmivore.

MARLBOROUGH FOREST INTERPRETATION PLAN: INTERPRETIVE RESOURCES

2. Integrated Resource Management

Marlborough Forest is the third largest municipally-owned forest in Ontario (of some 55 in the Province). A recently-updated Resource Management Plan specifies how the Ministry of Natural Resources will manage these public lands to the year 2010. The objective is to promote wise use and sustainable development of the whole environment in ways that will not limit future options.

There are several areas of the Forest that lend themselves to interpreting the topics relevant to this theme. One of the best for obtaining a balanced overview is the southwest or Paden Road sector of the Forest, accessed by several existing trails north of the Rideau Canal community of Burritt's Rapids. Here, many of the techniques of modern silviculture can be illustrated, by comparing how MNR manages natural and plantation forest zones.

The more complex issue of managing for greater biodiversity can also be introduced in this sector, as there are 3 Ducks Unlimited Projects aimed at enhancing waterfowl habitat. Field observers have noted an abundance of "non-game" wetland species, such as northern water snakes, in these ponds. Duck and geese nesters have not yet shown the anticipated increase, perhaps because the ration of open/wooded water has not yet reached 50%. Interpretive media can explore the issue of whether pond management techniques support or limit our ability to sustain provincially-threatened habitats and wildlife.

Other conservation measures designed to protect specific species and cultural resources can be discussed using the MNR-managed wildlife fields as an example (contribute springtime deer forage, small mammal habitat and a place for rare heath aster to flourish). Small poplar groves offer a good spot to introduce the role of groups like the Ottawa Ruffed Grouse Society; and Gilroy Farm can be mentioned in relation to the role of local heritage groups (role in stabilizing the ruins, monitoring development).

2.1. Natural Forests

Almost 60% of the NEA's public lands are forested and the natural (i.e. non-plantation) stands have regenerated following the 1870 Carleton County Fire. Yet most are less than 60 years old and were "high-graded" for their valuable timber, before acquisition and management under the present Forest Agreement. Also, 15% of the wooded area is categorized as Protection Forest (less than 15 cm. soil cover) while a further 15% is classed Barren and Scattered. Of the remaining 1200 ha., upland sites consist of mixed conifers (white cedar, white spruce, balsam fir and some aspen and birch). On the deeper soils (i.e. less than 1% of the Forest, here on the Limestone Plain) grow the shade-tolerant hardwoods: mostly sugar maple, ironwood and basswood, with some red oak and white ash.

The Selection System, the management technique used to maintain these shade-tolerant hardwoods, removes single, marked trees - diseased, badly-formed or of undesirable species - from across the age-range. This technique makes room for the best specimens to grow and gain vigor while leaving the overhead canopy intact. The one such forest in the Paden Road Sector, Lot 23a-Conc. 2 (Comp. 111c) has several rare or significant species, and should be flagged as a **"Significant Plant Habitat"** to ensure that such forest management does not destroy its interpretive value.

Small, but rich, this moderately-aged upland deciduous forest has maidenhair fern as a ground cover, a few provincially rare specimens, regionally-sparse mountain-rice and bottle-bush grass and several other species not known elsewhere in the Forest (black maple, broad-leaved sedge, Goldie's fern, moonseed vine). Blue beech co-dominates with black ash in the deciduous swamp portion adjoining, and an open red oak parkland is found a little further west, in Comp. 112. (Where mature oaks are present, it is forestry practice to modify the Selection System to create wider openings. This increases sunlight on the forest floor, improving production of acorns, a valuable food-source for deer, squirrels, chipmunks and other wildlife needing a large store of energy for winter).

2.1. Natural Forests (Cont'd)

On the Marlborough Forest's many recently-disturbed sites (abandoned farm fields, former quarries) various stages of natural succession are in evidence, as junipers give way to stands of poplar and other sun-loving species and these in turn gradually convert to the longer-lived shade-tolerants. Since many wildlife species depend on the early successional habitats for food and cover, selected areas with more than 10% healthy aspen in the **General Forestry Zone** (about 1% of the Forest in the 1990-1995 period) are to be harvested using a **Patch Clear-cut System**. Markets for this lower quality timber are poor, making this type of forest management a continuous challenge. The goal is to improve regeneration of these pioneer species (e.g. poplar suckering increases when the soil is opened up to the sun and conifers can no longer compete).

There are two or three tiny (i.e. < 1 ha.) **pure** poplar stands in the Paden Rd. sector. One such medium-aged forest with 80% balsam poplar, 20% trembling aspen is located near the existing trail in Lot 22d-Conc. 2 (Comp. 109d). Its soil is a loamy humus, its understory, white elm and many other shrubs. Is it matures, it will be an increasingly valuable interpretive resource and should be left as is, for comparison purposes.

As mentioned above, much of the Forest is in the **Cedar, Barren and Scattered** class. Lot 22-Conc. 2 (Comp. 109Ah) has one of the Forest's best examples of cedar-clump, alvar-like barrens: an easily-walkable abandoned pasture, with regionally-sparse upland white aster (1989 inventory; protect from inadvertent damage). The trail skirts other areas just to the north with dense, pure cedar stands (Comp. 109). When the time comes to harvest these, they will be clearcut in 4-8 ha. patches. If they are to yield harvestable timber, these stands cannot be left to over-mature. Cedars are subject to heart rot on these harsher, shallower sites, as early as age 60-80 years. They are still valuable thereafter, of course (e.g. deer browse and cover) but future management options become severely limited.

2.2. Plantation Forests

With most of the available sites already in plantation (close to 900 ha. of the Forest since 1965), the MNR's upcoming planting program is focussed on newly-acquired properties not needed for wildlife forage or for the preservation of significant plants. Lots 22/3-Conc. 2 (Comp. 109) are good places for viewing both new plantings and ongoing management operations, and they are accessible year-round via existing trails looping north from Paden Road. Groups that have already toured a nursery (e.g. MNR, Kemptville) might profit from a follow-up field-study of the difficulties of stocking the challenging sites in Marlborough Forest. Note that the goal of these plantations is environmental protection or amelioration (e.g. for wildlife, soil and water conservation), rather than production of commercial-grade timber.

In terms of existing plantation maintenance, during 1991/92, a trail-side 2-hectare section of planted jack pine in Lot 23e-Conc. 2 will be pre-commercially thinned, with 1 row in 3 cut. Jack pine has traditionally been chosen as a "nurse crop" for limy, eastern Ontario sites having < 20 cm. soil cover. Young pines protect the site from erosion, provide wildlife cover and partial shading, which in turn allows shade-tolerant hardwoods to naturally seed-in below. Trial underplantings are to be undertaken where a lack of available seed sources is preventing this from taking place. In 1993/4, on this same 2 ha., the thinned jack pines will be underplanted with 750 seedlings of hard maple and 750 of red oak: a feasibility test of this option.

Eastern white cedar is a natural pioneer species, providing winter deer browse and excellent wildlife cover. It is the stock of choice for replanting cutover areas in the **Modified Forestry Zone** (wildlife corridors adjoining wetlands) and is often planted on abandoned agricultural fields as well (e.g. Comp. 109b). It also occurs naturally as a climax species, seeding itself well even if the soil is shallow or exposed, flooded in spring or droughty in summer. It is favored here in the Marlborough Forest over white spruce, introduced Scotch pine and Japanese larch.

2.2. Plantation Forests (Cont'd)

White pine is becoming a popular plantation species, too. Its roots can penetrate the fissures in limestone, ensuring wind-firmness and an adequate uptake of water and nutrients, even if these are scarce near the surface.

Just north of Paden Road (Comp. 111b and environs), observers can examine previous plantings of white pine then check on the newest plantation: Lot 23i/j where the soil is 15-30 cm. deep and 10,000 bare-root white pine seedlings are to be planted in 1991/2 in the Modified Forestry Zone (abuts the Lower Brassils Cr. DU Project). They are due for chemical spot tending in 1993/4, if required, and when fully mature, will undergo a 50% shelterwood harvest to encourage a new cycle of white pine regeneration.

During the Life Science inventories, study teams found that where plantations abutted natural forest, there was plenty of "edge" habitat, favoring a diversity of avifauna. An example from the 1989 study in this sector is Comp. 109a2, where cedars had been planted in an open field vs. Comp. 109h/c, where jack pine, white spruce and larch had been planted in a shrubby field. The first plantation harboured 19 avian species, the second recorded 26.

In a marginally-productive forest like Marlborough, plantations can improve soil quality, help with water retention, provide food and cover for many animals and generally enhance the interpretive value of nearby, natural sectors. Even where unsuccessful, they tell us something about the natural history of a sector.

For example, during the 1989 Life Science Inventory, Lot 23c-Conc. 2 (Comp. 111g) was found to be very wet. Regionally-rare Torrey's rush was present and a dense young thicket of willows was successfully competing with the planted larch and cedar. The whole community was changing, a delayed result, no doubt, of the Lower Brassil's Creek Ducks Unlimited Project instituted in 1985.

2.3. Managed Wetlands

Six water impoundment projects have been undertaken by the Ducks Unlimited organization to enhance the Forest's water catchment and storage function, while providing open-water habitat suitable for both game and non-game species. Each development consists of earthen dams and a cement weir with its own flow-control device.

Two such developments were carried out in Conc. 2 during 1985: the Lower Brassils Creek Project, on Lots 23/24 (trail skirts east of it) and the Sand Hills Project, on Lots 21/22 (a spur from the proposed trail reaches its weir). Also, the dyke and weir complex of a 1984 Project on private land abuts the proposed trail, and its sweep of open water swings south to cross the Rideau Trail's raised roadway, along the northwestern boundary of Comp. 112.

The changes in the surrounding landscape are evident from the 1989 Life Science inventory. It notes that Comp. 111a/e/f/h/i is fast approaching a marsh classification, with purple loosestrife and cattails invading agressively. The open water is dominated by burreed, frog's-bit and common bladderwort. Some black ash and red maple trees are still alive on the fringe, but there are many standing, dead trees.

The changes have favored many bird species. The 1988 inventory noted black tern, pied-billed grebe, Savannah sparrow and turkey vulture in the Lower Brassil's Creek Project; and the regionally-significant swamp sparrow and marsh hawk were recorded in 1989 for Comp. 109f/109Ag of the Sand Hills Project. Unfortunately, the sought-after ducks and geese have not flocked in, probably because, as with the other 4 developed in the Forest, these ponds started out with more tree-cover than was considered ideal. The drowned tree die-off continues, but has not reached the 50:50 ratio of open water-to-treed swamp deemed optimal for waterfowl production.

2.3. Managed Wetlands (Cont'd)

Although there will be no new projects until the benefits are proven, Ducks Unlimited workers will continue the existing program as planned, including a partial draw-down of each pond, every 4-6 years. This will allow organic material accumulated over the period to be exposed to the air, speeding decomposition and the release of nutrients, without a corresponding loss of water-dissolved oxygen. The aquatic vegetation will rejuvenate as the pond is reflooded, and the cycle will begin again.

2.4. Feature-specific Management: Wildlife fields and Deer yards

The Ministry periodically schedules prescribed burns, brushing or mowing of Wildlife Fields, to rejuvenate grasses and eliminate undesirable weeds and brush. In 1991/2, 2 ha. of Lot 23l, 7 ha. of Lot 21j-Conc. 2 are slated for such management. The blackened soil generally has good fertility, and in a few years' time, the forbs and grasses will be an excellent spring-time feast for the deer of the area.

Spring and summer natural science groups might be encouraged to conduct an ecology study of the recently-managed fields compared to nearby cedar/alvar clearings and tree plantation plots, using live-traps to record the activities of small mammals. Their results could form part of the interpretive story, illustrating how integrated environmental management can enhance biodiversity.

2.4. Feature-specific Management: Ruffed Grouse Woodlots

Grouse Management Block 2, Conc. 8, Lot 15 (NW corner Comp. 25, Central Forest Sector) is the on-site example of this sub-theme. Grouse are found in the Paden Rd. sector (1988 inventory, from Comp. 109k, 112c). As creatures of the mature aspen forest, they could be mentioned during interpretation of the 100% poplar stand of Comp. 109d. (Note: this tiny, 1 ha. stand is not large enough to guarantee year-round food and cover for even 1 breeding pair and unless managed, aspen pioneers decline within 40-60 years.)

2.4. Feature-specific Management: Other Significant Resources

There are 3 heritage buildings on Agreement Forest Land, outside the Natural Environment Area, that have been flagged for specific management. An old schoolhouse west of the Forest-proper is being conserved in a way that will not limit future options (it is used to store firewood for Rideau Trail skiers). Similarly, southwest of the Paden Road sector, and easily reachable from it by trail-bike, are the Gilroy Farm and the Thompson Place. MNR and RMOC have been working cooperatively with local heritage groups, to stabilize and preserve these farmsteads, within their respective mandates of conserving significant cultural resources and allowing interpretation of the region's heritage themes, which would presumably include Surveys, Settlement, Subsistence Farms.

Not all features "of Life Science Significance" have been flagged for Interpretation purposes. For some, the motivation was to avoid attracting undo attention to a rare plant that might be harvested (i.e. protection considerations). In others, it was a case of weighing such criteria as thematic relevance, carrying capacity, access from/proximity to other recreational services, a process which tended to lower the potential of isolated sites.

Example: large peach-leaf willows in the silver maple floodplain forests of the Jock River (Comp. 21/21A) and Upper Brassils Creek (Comp. 96) were noted as preservation-worthy but not selected for on-site interpretation. Lac Leamy Ecological Park (Ottawa River, opposite Parliament Hill) has an accessible silver maple wetland forest, well-known to natural science educators via Dan Brunton's book. The inventoried Marlborough Forest sites have poor access, are outside the designated Natural Environment Area and subject to ongoing uncontrollable encroachments from nearby private land: logging noise, cattle-grazing, ATV/snowmobile damage and beaver-flooding among them. Moreover, Baxter Conservation Area plans to interpret the region's floodplain communities, as part of its mandate. This feature could better be illustrated in RVCA slide-shows, exhibits and public programs, without any development of on-site interpretation facilities; and groups could still follow up with guided walks, canoe or ski-ins, to observe these forests.

2.4. Feature-specific Management: Other Significant Resources

The Paden Rd. sector has many significant features, but the Central Forest sector had a greater potential for interpreting the specific management sub-theme. A nature trail from Comp. 48 to the south end of Phragmites Fen could allow interested Rideau Trail users to contrast how the following habitats are managed:

Classified Wetland (ANSI Fen) & fringing Modified Forestry Area

- a treed swamp with a diverse ground flora that includes marsh fern and the regionally-significant buckbean, three-leaved false Solomon's seal and narrow-leaved willow herb (Compartment 49Ac).

Significant Plant Habitat

- a drier forest in 25B/b having a closed-canopy sugar maple and maidenhair fern community; adjoining 48b is a newly cut-over forest/wetland by the road, with rare Pyrola chlorantha, etc.

Natural Ponds

- an old heron rookery east of the Rideau Trail (Comp. 49e) with narrow-leaved willow herb, evidence of a previous forest fire and 33 spp. birds; compare to wildlife pond #6 (swamp sparrow noted).

General Forestry

- an upland mixed forest of cedar, white spruce, balsam fir, white birch and poplar of fairly young age (48c, west of pond; in 1989 home to a natural colony of 100+ ram's-head lady-slipper;

- a nearby forest of butternut and bitternut hickory (48f), with breeding American woodcock, black bear tracks; contrasted with a sedge-dominated parkland, only 80% canopy-covered with cedar, balsam fir and poplar of young age (Comp. 48j) having regionally-rare Pyrola chlorantha, great-horned owl, northern goshawk, yellow-bellied flycatcher, deer, coyote and signs of black bear.

2.4. Feature-specific Management: Ruffed Grouse Woodlots

Finally, Grouse Management Block 2, Lot 15-Conc. 8 (northwest corner of Comp. 25, Central Forest Sector) provides a site for direct interpretation of the ruffed grouse specific management sub-theme. Here and in the surrounding plots, the Ottawa Chapter of the Ruffed Grouse Society will be working with MNR, to manage 80 ha. Their aim: to guarantee habitat for 20 breeding pairs (yielding annual harvests of 60-200 birds). The silvicultural technique to be used: 50% patch clear-cuts of 1 ha. plots, in an alternating checkerboard pattern, with a full rotation cycle every 10 years.

The result will be an aspen forest maintained at different age classes, each supporting a different stage in the life cycle:

- sapling stands, for brood cover; here the 10+ chicks per pair can feed upon their start-up diet of insects;
- thinned and opened-up polewood stands aged 6-25 years, aiding the growth of herbaceous vegetation, their summer food;
- mature stands of pure aspen, permitting nesting in thermally-protected burrows deep in the soft snow cover of the forest floor while guaranteeing ample supplies of the winter staple food: the male flowerbuds/catkins.

The management plan calls for snags and cavity trees to be left as nesting sites, to a density of 15 per hectare. And nearby dense cedar stands must also be left as is, to provide alternate cover in the event of severe ice-crusting (freezing-rain).

This concludes the resource analysis for this Interpretation Plan. On the following page is a list of first or significant plant and animal sightings, culled during a review of the Life Science Inventories, and recorded here for reference purposes.

MARLBOROUGH FOREST INTERPRETATION PLAN: INTERPRETIVE RESOURCES

Sites flagged during a review of the Marlborough Forest Life Science Inventories are noted below. Updating will be required:

- first recording round-leaved orchid in 8f
- " " clay-coloured sparrow in 26d/e,
- " " hoary vervain in 37r
- " " rigid sedge, Carex tetanica, in Comp. 63g
- " " mountain clubmoss 81b
- " " whorled polygala in 82
- " " northern bedstraw in 98Ah
- " " Hudsonian clubrush, green cotton grass, 103b
- " " meadow spikemoss 105h

- Sartwell's sedge in 84b, 103b
- heath aster: 64g, 112k (109/110, outside designated NEA)
- whorled milkwort in 93/94d
- twig rush in Site 3 (19B?) at north end of Phragmites fen
- walking fern, Cedar Grove Picnic area cliffside, Comp. 79
- ram's-head lady's slipper, Comp. 48c, 53;
- cardinal flower, Comp.56
- blandings turtle: Comp. 26b, south 46 and elsewhere
- active heron rookeries, 4A/f, environs 41; inactive in 48/49
- osprey feeding territory, Nicholl's Creek (Comp. 18E/d)
- loggerhead shrike nesting (Comp. 67a)
- bluebird nesting (Comp. 28c)

MARLBOROUGH FOREST INTERPRETIVE PLAN: SELECTED BIBLIOGRAPHY

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"Resource Management Plan for the Municipality of Ottawa-Carleton Marlborough Forest", Ont. Ministry of Natural Resources, 1990.

MARLBOROUGH FOREST INTERPRETATION PLAN

APPENDIX 4.2: REGIONAL SUPPLY OF INTERPRETIVE SERVICES (SURVEYED)

1.	RVCA BAXTER CONSERVATION AREA	Leanne Kane
2.	RVCA FOLEY MOUNTAIN CONSERVATION AREA	Barry McQuay
3.	MVCA PURDON CONSERVATION AREA (Fen)	Sandy Hay, Mike Yee
4.	MVCA MORRIS ISLAND CONSERVATION AREA	Sandy Hay, Mike Yee
5.	CPS RIDEAU CANAL: BURRITT'S RAPIDS	Ken Robinson
6.	NCC STONY SWAMP CONSERVATION AREA	Wayne Johnson
7.	NCC GATINEAU PARK	F.Leduc, G.Simoni
8.	NCC MER BLEUE CONSERVATION AREA	Mike Calvert
9.	MNR HOWARD FERGUSON FOREST STATION	A.Campbell, G.Whitaker
10.	MNR LAROSE FOREST	Ian Kentell, Don Cuddy
11.	MNR RIDEAU RIVER PROVINCIAL PARK	Paul Wootton
12.	MNR MURPHY'S POINT PROVINCIAL PARK	Shelley Ross

Also, the following people were contacted concerning heritage:

John Ritchie, Rideau Township Heritage Board
Carmen Bickerton, Carleton U. researcher of local 1791 survey
Betty Bartlett, schoolhouse researcher and LACAC representative
Georgie Tupper, Gilroy Farm researcher

not contacted: Historical Society of North Gower Pres. Les Linnen

CURRENT SUPPLY OF REGIONAL SERVICES VISITOR ACTIVITY GROUPS: Trail users, Nature observers, Picnickers/Beach day-users (hunters, campers, motorized vehicles not allowed)

Services Provided: SITE: BAXTER CONS. AREA	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	RVCA, MTC (Hwy. 16 sign)	RVCA	RVCA coordinator, 1 assistant, based on site	RVCA	RVCA	RVCA
Location	HQ, kiosks, Brunton book	sign at entrance & bldg.	trailer in 1989, new building by June, 1990	Rideau R. beach/picnic		
Time Period	year-round	year-round	personal and non-personal services yr-round	year-round, day-use		
Frequency	local mailout ea. season	extended pers. services	2 guided walks, Sundays, Jan-Mar; May & Oct.	daily		
Capacity	moderate	parking accommodates 100	small groups best: 4.8 km. trails on 68 ha.	parking for 100 vehicles		
Current Use	Valley fair passers-by	9,150 =64% of 1989 users	good use winter weekends/self-guiding brochures: marsh, swamp woodlot			
Satisfaction	no data	trailer not visit-worthy	good 4-season birding, herptiles, lush woods	appreciate ploughed lot		
Program Strengths	new bldg. better suited to communicate cons. info		new self-guided river/marsh walk welcome; family outings near Capital			footbridge across marsh
Program Weaknesses (Shortfalls/overruns)	no Capital tourist info except newspaper notices	personal service decline will be rectified in '90	flood-tolerant red maple forest = small area floodplain ecology needs better interpreting	at only 68 ha., could be subject to overcrowding	planted bl. walnut grove not climax floodplain sp	uneven surface and spring flooding: no disabled users
Relevant Trends	sponsored tabloid use up	multi-purpose staff role	RVC Foundation: all-terrain wheelchairs, etc	2nd Greenbelt movement	ethic via AV programming	surfaced: universal-access
Management Concerns	conservation education, including its promotion and on-site personal/non-personal services not core-funded program-1990				cleaning up work-site, preparing for 1990 opening	
Program Development Opportunities	work cooperatively with RVCA, RMOC: Marlborough	interesting demo. opport (on photo-voltaic power)	Marlborough Forest could be identified as a possible follow-up: mature floodplain forest	tie-in camping, 9km west (Rideau River Prov Park)	new bldg: activity area (rainy-day/beach relief)	new outdoor ed. library to be usable by drop-in public
Resources Expended Forecast	No data	Carleton R.C. Schoolboard Co-op. Ed'n Program contributed 60 p-days to RVCA work; Carleton Board, 5; no institution of user fee as of yet		2 new trails: $ _____		1988 bldg. design fees were $55K; replacement $200,000+

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Educational groups

Services Provided: SITE: BAXTER CONS. AREA	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	RVCA/some RMOC/CPS(maps)	RVCA	RVCA coordinator, 1 assistant, based on site	RVCA	RVCA	
Location	offices of above, kiosks	sign at entrance & bldg.	trailer in 1989, new building by June, 1990	Rideau R. beach/picnic		
Time Period	year-round	year-round	year-round	year-round, day-use		
Frequency	local mailout ea. season	extended pers. services	educational groups usually book .5 day each	daily		
Capacity	fairly low	new bldg accommodates 50	if self-guided, 5km nature trails on 68 ha.	parking for 100 vehicles		
Current Use	leaders see fair booths	3506 sch./1778 other grp	many groups make use of naturalist guide now	good use winter weekends	bluebird boxes, Trees for Canada plantation (Cubs)	
Satisfaction	no data	good, many returns ea yr	good for birding, even winter due to feeders	appreciate ploughed lot		
Program Strengths	goodwill, local schools	new bldg. will be ideal	new self-guided river/marsh walk; floodplain	family outing from Ott.		footbridge across marsh
Program Weaknesses (Shortfalls/overruns)	better penetration of regional market needed	trailer not enticing but program carried on, 1989	small drop while awaiting bldg.; highschool groups would benefit from hinterland exper.	at only 68 ha., could be subject to overcrowding	planted bl. walnut grove not climax floodplain sp	uneven surface and spring flooding: no disabled users
Relevant Trends	sponsored tabloid use up	multi-purpose staff role	non-profit RVC Foundation funding of extras	2nd Greenbelt movement	new bldg: AV programming	surfaced: universal-access
Management Concerns	conservation education, including its promotion and on-site personal/non-personal services not core-funded program-1990				cleaning up work-site and	preparing for 1990 opening
Program Development Opportunities	work cooperatively with RVCA, RMOC: Marlborough	attend PD resource days held by regional Boards	Marlborough Forest could be follow-up trip, esp. highschool age/mature floodplain forest	group camping tie-in 9km west at R. R. Prov. Park	new bldg. incl. area for rainy-day/follow-up act.	new outdoor ed. library to be usable by drop-in leader
Resources Expended Forecast	No data	Carleton R.C. Schoolboard Co-op. Ed'n Program contributed 60 p-days to RVCA work; Carleton Board, 5; could be ongoing help to Baxter prog		2 new trails: $ _____		1988 bldg. design fees were $55K; replacement $200,000+

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Educational Groups, Trail users, Nature Observers, Picnickers/Day-users (hunters, off-road motorized vehicles not allowed)

Services Provided: SITE: FOLEY MOUNTAIN CONSERVATION AREA	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	RVCA: daytrip, CCV guide	RVCA	RVCA/part of mandate to educate: wise mngmt.	RVCA	RVCA	RVCA
Location	office, Westport, kiosks	Trailhead	6 km nature trails, incl. 1.5 km self-guided	8 grp. campsites/shelter	beaver dam, deer yard	
Time Period	primarily summer & fall	most=spring/summer/fall	dropped Feb. winter experience as snow poor	year-round, self-guided	as needed	bldg. must be multi-purpose
Frequency	update map every few yrs	personal services infreq	bldg open Sat/Sun in summer & other drop-ins	anytime		
Capacity	low exc. if by newsmedia	approx. 20 people/leader	set on 314 ha. of land and lakeshore; parks	50 cars; 12.9 km trails		
Current Use	Personal & phone queries	78% general public; ed.	groups = 3,655 students & 1,705 other groups	declining use/ski season		
Satisfaction	No data	public prefer self-guided	nature hikes to beaver pond, lookout	new picnic shelter liked		
Program Strengths		flexible re: ed'n topics	illustrated booklet/14 stops prompts hr.hike	overnight: social skills	winter deer viewing good	
Program Weaknesses (Shortfalls/overruns)	Destination not promoted much/quite far from Ott.	bldg. cannot be open yr. round; main use = summer	winter road access difficult (steep); try to match curriculum: Gr. 6 not keen on woodlots	no urban centres nearby; mostly Westport tourists		
Relevant Trends	Tourists unaware Cons.A.	trend to warmer winters	conservation education not a funded program	more summer use/less ski		
Management Concerns		exploring coop. programs	may have to revamp program, charge user fees	brush cut for deer mngmt		
Program Development Opportunities	Westport Chamber Commer. could promote summer use	winter camping by Scouts and other ed'n groups?	no clear link with Marlborough Forest issues except users'balancing of conservation ethic	promote Scout use: OK if use/return pre-cut brush		
Resources Used/Forecast	No data	1 staff, extra summer $	$400/yr. + staff time (1 Py)	$7700 grp.picnic shelter		

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Educational Groups, Trail users, Nature Observers, Picnickers/Day-users (hunters, campers, motorized vehicles not allowed)

Services Provided: SITE: PURDON CONSERVATION AREA	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	MVCA office (Lanark)	MVCA	MVCA/part of mandate to educate: wise mngmt.	MVCA since 1984 acquisition of property		MVCA
Location	Lanark, Mill of Kintail	media, trailheads, fairs	no bldg. but boardwalk through wetland area	picnic area, boardwalk	inventory/mngmt. 16,000 showy ladyslipper orchids	
Time Period	primarily spring/summer	most=orc.blooming season	no winter use: peak bloom in June/early July	May 15 - Oct. 15 only	annual shrub-thinning	regular check overflow pipe
Frequency	update lit. each few yrs	personal services, if $	try to have trail-roving summer interpreters			no winter plowing of lots
Capacity	low exc. if by newsmedia	20 people/leader ideally	staff tours 2 days/wk; trails = 300m & 100m	site only 18 ha. in all		boardwalk accesses fen
Current Use	media locally, in spring	travelling exhibit/fairs	3,000 visitors/yr., most in blooming season			
Satisfaction	attractive col.'89 broch	fees led to decline in #	beauty of showy ladyslipper orchids worth it	$12K visitor survey 1988		
Program Streagths	Gatehouse=contact point	exc.flyers (fen/orchids)	illustrated self-guiding flyers for 2 trails	scenic lookout near lake	outflow controlled naturally by beaver dam: checkups	
Program Weaknesses (Shortfalls/overruns)	Destination not promoted much/quite far from Ott.	locally known as a "boo" now "useful" for blooms	emphasis=showy flowers, not rare fen plants; disabled trail uses different trailhead, lot	no urban centres nearby; 3000=locals, in the know	it takes 15 yrs. for this sp. to bloom from seed; even with brushing, max. 25% pollination rate	
Relevant Trends	Tourists unaware Cons.A.	trend to user fees	conservation education not a funded program	visitors return, summer	experiment with artificial propagation select plants	
Management Concerns	Want to avoid over-use	proj. $2500 in user fees	may have to revamp program, charge user fees	2nd loop trail in budget		
Program Development Opportunities	Use Mill & extension ed. program = 8,000 in '89	desktop-published guides cost-effective interp'n	Marlborough Forest lacks personal interest story of conserver Purdon; fen more natural?	add self-guiding flyers re: beaver dam/Mud lake	coop. with M.V. Field Naturalists re: biology info. on birds, insects, mammals, other plants in habitat	
Resources Used/Forecast	No data	took <10% fees projected	1 education program staffer for peak season	1989 maintenance = $1200		

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Educational Groups, Trail users, Nature Observers, Picnickers/Day-users (hunters, campers, motorized vehicles not allowed)

Services Provided: SITE: MORRIS ISLAND CONSERVATION AREA	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	MVCA & RMOC (Lanark/Ott)	MVCA: 1990 opening	MVCA/master plan base for self-guided interp	MVCA, RMOC in association with Ontario Hydro/east		MVCA & p[illegible] private stakeholders
Location	offices of above, kiosks	trailhead media planned	none so far except Trail & Landscape feature	walking trails/shore rds	distant landlords: costly to prot[illegible]	ect/manage sites
Time Period	likely on request, only	will be year-round	will be year-round	will be year-round (ski)	Hydro routinely trims brush, 425	ha. it owns
Frequency	" " " "	self-guided anytime		anytime		MVCA has 25 yr. RMOC lease
Capacity	low as new, little known	depends on parking lots	several access points to 3x6=18 sq.km island	47 ha. site with canoe launch, fishing platforms		rlwy. tr[illegible] ail surfaced: exc.
Current Use	next to none	none as of yet	no count as of yet; some use abandoned rlwy.	ice fishermen (no boat access permitted, summers)		barrier across headpond bay
Satisfaction			Alt. rocky/marshy shore has unusual wildlife	appreciate scenic rocky islands off north shore		no bldgs; plan picnic areas
Program Strengths	RMOC gives Ott. info pt.	RMOC budget: map flyers?	post-1918, ~100t Cdn. lead from Kingdon Mine	rock spikemoss, prairie dropseed, osprey, map and blanding[illegible]		s turtles: rarities
Program Weaknesses (Shortfalls/overruns)	Destination not promoted (off the beaten track?)	not likely to ever have personal orient. service	abandoned mine cannot be opened: off-site interpretation/story of ore and town: Galena	remnant of voyageurs' portage: how to protect?	first authority conservation area RMVCA/MVCA merge, must redefine re[illegible]	for O-C, but when ec'n roles of sites
Relevant Trends	Tourists unaware Cons.A.	trend to impersonal serv	conservation education not a funded program	2.5 km abandoned rlwy.	OFNC valuable: spp. I.D.	Conserva[illegible] tion Foundation aid
Management Concerns	Avoiding improper uses	do signs ensure wise use	may have to charge user fees for all service	bridge required on above	need input: self-guiding	help dis[illegible] abled: trail access
Program Development Opportunities	Use other RMOC/MVCA pts. of contact to publicize	tie-in with orientation at Fitzroy Prov. Park?	self-guiding map & water mngmt/history c/o personal services tied-in with Fitroy Prov.	trail-bike rental outlets? Park, esp. education grps	coop. with OFNC/MVFN re: rare spp. habitat needs	economies of scale allow more development once merge
Resources Used/Forecast	No data					Study, 1989: $51,000

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Boaters, Trail users, to lesser extent, Picnickers/Day-users (hunters, campers, etc. are not allowed)

Services Provided: SITE: BURRITT'S RAPIDS (RIDEAU CANAL)	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	Canadian Parks Service, Environment Canada					
Location	lockstation, town of Burritt's Rapids, environs		Tip to Tip self-guided trail from locks through town to point: 4.1 km		lockstation and surrounding Crown-owned lands	
Time Period	mostly boating season; winter travelling exhibit		Canal usually removes interpretive panels during winter: boat season			boating season
Frequency	self-guided anytime; exhibit on 2 wk. rotations		self-guided, so anytime	anytime		
Capacity	in 1000s, extending range of CPS. canal brochure		reduced from 9 to 7 stops: in & out, 1.5 hr.			checked often, hi standards
Current Use	exhibit = planning stage		no count	some boaters have bikes	creating formal trail discourages wandering all over	
Satisfaction	saw need to redraft trail brochure; canal one OK		under revision to closer suit themes: surveys, changes Canal made to environment, wetland role			will be basis for 7 panels
Program Strengths	nature exhibit will interpret fur-bearing mammals of Rideau wetlands (tracks/traps mink/otter)			tourism promo a mandate		
Program Weaknesses (Shortfalls/overruns)	few boaters actually leave waterway currently	nearest personal services are children's programs at Sniths Falls, Merrickville: 2/9 on nature only other self-guiding nature interpretation is Rideau Canal at Tay Marsh: platform overlook			overrun may be special events such as raptor program held in Merrickville; costly conservation promotions	
Relevant Trends	boaters unaware of Rideau Trail & related opport.		natural interpretation secondary on Canal	R. Trail nearby-user grp	conservationists monitor	adaptive rehab hist. bldgs
Management Concerns	coop. tourism promotion	do signs ensure wise use	may have to charge user fees, personal serv.		heritage bldgs. enroute	
Program Development Opportunities	potential coop. extension programming with Forest (it is already marked on well-circulated R.C.map)		self-guiding map with story of canal & land surveyors (By's crews in 1826; de Pincer in 1791); could be distributed at lockstation for boaters with trailbikes aboard, at local B&Bs, renters			Forest & natural follow-up: wetlands, hist. Gilroy farm
Resources Used/Forecast	No data					

CURRENT SUPPLY OF REGIONAL SERVICES \ VISITOR ACTIVITY GROUPS: Educational Groups, Trail users, Nature Observers, Picnickers/Day-users (hunters, campers, motorized vehicles not allowed)

Services Provided: STONY SWAMP, GREENBELT (incl. co-op ventures)	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	NCC	NCC/O.V. Field Trips etc	O.V. Field Trips/sporadic NCC staff (summer)	Rideau Trail Assoc, NCC	MNR foresters/NCC warden	NCC, City Nepean, LPTS, &c.
Location	14 Metcalfe Info Centre	Conservation Centre bldg	nature trails, Conservation Centre exhibits	Trails for hiking/skiing	Plantations/beaver dams	from NCC Richmond District
Time Period	7 days/wk., year-round	now by pre-booking, only	personal services by pre-booking with OWFT	Year-round, self-guided	Sporadic, as $/Py permit	bldg. closed most of time
Frequency	Grnblt map every few yrs	personal services infreq	5 da/wk. in summer if resources permit (NCC)	Anytime	1 NCC warden for Grnblt.	groups clean after on. use
Capacity	Print run in 1000s/yr.	approx. 20 people/leader	Centre: 50/day vs nearby Log Farm: 1,000/day	2,000 ha. & park 300/day	Radio-summons if problem	no time spent booking grps.
Current Use	Personal & phone queries	summertime, few times/yr	interp. beaver/role of Grnblt/nat.succession	v. crowded in ski season	step-up re: X-mas trees	except LPTS, very underused
Satisfaction	No data	disappointed by decline	enjoy trails; nearby Sarsaparilla (disabled)	glad can still park free	conservationists'concern	perceived decline standards
Program Strengths	Kiosk is at tourist node	bldg. design well-suited	coop'n with field trip entrepreneurs begins	ideal for short outings	>700 spp-most in all NCR	none
Program Weaknesses (Shortfalls/overruns)	Destination not promoted overly/no Transpo access	no tie-in with Log Farm VRC (personal reception)	no resources to coordinate on ongoing basis; weak commitment to existing volunteer groups	no ski/bike rental near; far from core/no Transpo	Knoxdale alvar prone to damage; sites vandalized	used to be held up as an example to nation; not now
Relevant Trends	Tourists unaware Grnblt.	trend to impersonal serv	NCC downplaying non-centretown tourist activ	more ski use/less summer	insufficient prot'n $	harvest maintenance, no more
Management Concerns	Want municip. to do more	more vandals, ethic lost	finding ways to cut budget & grants-in-lieu	liability; vandalism up	too much spread out land	little value for $ expended
Program Development Opportunities	Coop. entrepreneurs need design/translation help	on-site map-boxes & coop groups for personal serv	use Friends of Stony Swamp, existing Rideau Trail Assoc'n, Log Farm Trust Society vols.	better municipal coop'n: plough parking lots now	CFNC bird feeder/J. Pine & youth vols. could help	outlook bleak given v. poor track record with LPT Soc.
Resources Used/Forecast	No data	1 summer staff if funded	as at left: <.2 py; future funding unclear	negligible NCC/some vol.	1 py. for all Grnblt.	possible vol. Pys (Friends)

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CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Educational Groups, Trail users, Nature Observers, Picnickers/Swimmers, Campers (hunters, motorized vehicles not allowed)

Services Provided: GATINEAU PARK, QUEBEC	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	NCC	NCC	NCC, private sector: e.g., O.V. Field Trips	Camp Fortune/Gat 55, etc	RCMP & NCC cons.officers	NCC, RCMP (Parkways), towns
Location	Old Chelsea/Lac Philippe	as at left + trailheads	nature trails, Estate & V.R. Centre exhibits	biking/hiking/ski trails	eg. nuisance dogs/beaver	from NCC Old Chelsea office
Time Period	7 days/wk; to 9pm summer	2 newspaper tabloids/yr.	Estate/L. Philippe, May 24th-Oct; VRC winter	camping mid-May to Oct.	year round patrols	7 shelters have radio link
Frequency	Gat.Pk.map every few yrs	most personal=summertime	6 eve/3 Sun pm snowshoe; almost daily/summer	ski tracks set regularly	froquency varies thru yr	skipatrol/groups self-clean
Capacity	Print run in 1000s/yr.	campers' eve: up to 250	if include tabloids/self-guided, reach 1000s	13 P. lots; 190 km ski trails; 9 shelters, 40 km. Parkway, camping, 35000 ha		
Current Use	24-hr. message: 20,000	W. King Estate #1 sector	interp. role of W.L.M. King, Shield ecology	winter camping upswing	duties broader than past	drop in use due to fees,'89
Satisfaction	Good for ski conditions	very good to excellent	enjoy self-guided trails; Hickory (disabled)	many upset ski trail fee	problem dogs/wild leeks/dam-bursts threatening bldgs	
Program Strengths	Kiosks are at vis. nodes	good distrib'n thru year	tied to Winterlude (snowshoe)/Fall Rhapsody	suits variety rec. needs	only handful cons. staff	disabled Trail/fishing dock
Program Weaknesses (Shortfalls/overruns)	Promoted as destinations (tourbus); no Transit	tied to Fall Rhapsody, less well other seasons	free personal programs in winter an overrun; conserv'n officers not trained to interpret	sites spread out, so do favor private automobile	may have taken resources needed to protect Grnblt	slow to close off overused areas: Pink L./L. Philippe
Relevant Trends	Tourists seek greenspace	OVFT org. avg. 1 tour/mo	OVFT tranports/interprets: elderly, disabled	winter fishing/skate-ski	aerial fire surveillance	user fees fund maintenance
Management Concerns	Uphold world class image	rationalize re: user pay	finding ways to have coop. groups interpret	40 km snowmobile at edge, but may encroach & harm		good value for $ expended
Program Development Opportunities	sponsored tabloid/events Ott.Bicyclists/C.Fortune	conservation officers to add interp messages, too	continue to use many volunteer interpreters during successful Fall Rhapsody Pkwy program	coop. with org. Gat. 55, now commonplace/many gps	OFMC, MNRS scientists & other experts to monitor	volunteer ski patrol, other help enhances quality fac.
Resources Used/Forecast	No data	varies year to year/future funding may be tied to user-pay philosophy		snowshoes $2/pr; primitive camping $2.50/site; skiing $5.00/day; vehicles: $4		

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Educational Groups, Trail users, Nature Observers, Picnickers/Day-users (hunters, campers, motorized vehicles not allowed)

Services Provided: MER BLEUE, GREENBELT	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	MCC + OFVT, OFNC, MNRS.	MCC/O.V. Field Trips etc	O.V. Field Trips, etc. at present, no MCCers	MCC, Gloucester Twp. aid	MNR foresters/MCC warden	MCC, City Nepean, LFTS, &c.
Location	14 Metcalf tourism kiosk	trailhead orient. panels	2 trails: Dewberry on Dolman; bog, Borthwick	Trails for hiking/skiing	plantation/boardwalk/dam	MCC, St. Laurent District
Time Period	7 days/wk., year-round	anytime	personal services by pre-booking (e.g. OVFT)	Year-round, self-guided	1 MCC warden for Grnblt.	boardwalk only large facil.
Frequency	Grnblt map every few yrs	personal services infreq	infrequent, but possible any week of year	Orleans Nordic set track	step up: blueberry burns	accessible year round
Capacity	Print run in 1000s/yr.	approx. 20 people/leader	parking lots access ridges/3100 ha. peatland	ample parking lots/ridge	radio-summons if problem	as equipt., staff available
Current Use	Queries; Brunton refbook	summertime, few times/yr	interp. one of largest conserved bogs/S. Ont	v. crowded in ski season	moat protects "Islands"	except in winter, underused
Satisfaction	No data	some pay OVFT to guide	winter use OK/discourage group access to bog	glad can still park free	conservationists'concern	no disabled trail access
Program Strengths	Kiosk is at tourist node	cost-effective given use	coop'n with field trip entrepreneurs begins	boardwalk access to bog	spotted turtle, rare spp	for self-guiding, v. good
Program Weaknesses (Shortfalls/overruns)	Destination not promoted overly/no Transpo access	main-road signage is not adequate to direct vis.	most vis. unaware of bog's nat. significance weak MCC commitment to interp. as mngnt tool	no ski/bike rental near; site damage potential hi	Ramsayville Marsh "burn" to restore waterfowl hab	water level control is not possible: outlets not MCC
Relevant Trends	Tourists unaware Grnblt.	trend to impersonal serv	MCC downplaying all non-centretown tourism	an OVFT fall destination	few $, so laissez-faire	boardwalk: freq.maintenance
Management Concerns	Want municip. to do more	more vandals, ethic lost	additional 2,000 ha. peat not yet MCC-owned	danger of unexploded bombs from W.W.II: liability		little value for $ expended
Program Development Opportunities	Coop. entrepreneurs need design/translation help	on-site map-boxes & coop groups for personal serv	create Friends of Mer Bleue, work with OFNC, to interpret significant mammals, birds, etc	coop partners: set track & plow parking lots now	new Greenbelt Master Plan scheduled 1991-1993, with interpretation role as "management tool" reiterated	
Resources Used/Forecast	No data	1 district Py to be staffed	to work part-time with partners/coop.grps	negligible MCC/some vol.	1 py. for all Grnblt.	district redirects spare $

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Educational groups and to lesser extent, Trail users/Picnics (hunters, campers, motorized vehicles are not allowed)

Services Provided: SITE: KEMPTVILLE NURSERY FOREST (Ont. MNR)	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	Ontario Ministry of Natural Resources		Nursery/Forest Management Education mandates			
Location	G. Howard Ferguson Forest Station-56 km so.Ottawa		Nursery + 8 km nature trails in adj. forest	2 picnic areas No. stn.		2 + future 3rd parking lot
Time Period	now April to December (tried year-round, but not much to see in Nursery operations, Jan-Mar.)					
Frequency	info updated as needed		groups met 9:30 am weekdays; Sat. if Scouts	anytime: skiers/walkers	no cyclists on trails	brochure box often refilled
Capacity	returns + new queries: tourguide is fully booked		ideal=30/tour; Ottawa grps=4 hr ea; 4,000/yr	20 km of rd; parking: 30	grow GW trees for shipment i.e.half nursery capacity	
Current Use	2 brochures mailed to group leaders as do booking		3200, mostly Gr.5-8: MNR films/slides + tour	local skiers freq. users	creating signed trails tends to discourage wandering	
Satisfaction	adequate for general awareness & site orientation		Ott.Sep.Bd. block-books 3 buses/wk of Gr.5's	community goodwill high		
Program Strengths	only 1 of 10 Prov. nurseries to extenstively promote and book groups for personally led tours			recreationists report vandals/caught tree poacher		
Program Weaknesses (Shortfalls/overruns)	explains origin of name, stn functions/priorities but not too much re: managing for timber and game		6 little "educational" labels on Beech Trail tattered; replace-downplaying pesty wildlife	S. picnic site has small parking lot, lacks water	posted signs don't scare off vandals/snowmobilers	
Relevant Trends	Open Houses/Woodlot Days build neighborhood watch		coop. programming with Rideau R. Prov Park	create pers.serv. demand	"eco-neighborhood watch"	
Management Concerns	not base-funded operat'n/nursery not self-guiding		new self-guiding Forest Mngmt. Trail with #d stops/flyer and trailhead parking nearer HQ to reduce vandalism, upkeep cost			
Program Development Opportunities	potential coop. extension programming with Forest (tracing success of nursery stock on tough sites)		Nursery Station personal programs could lead to follow-up Marlborough Forest self-guiding trips to see success of plantations on diff. soils			
Resources Used/Forecast	No data		.75 Py + .35 Py asst. for summer trail devel		Envir. Youth Corps & Junior Ranger trail/nursery aid	

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Educational Groups, Trail users (incl. motorized vehicles) and, to lesser extent, Picnickers, Hunters (campers not allowed)

Services Provided: SITE: MNR LAROSE FOREST (PRESCOTT/RUSSEL)	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	MNR, United Counties of Prescott & Russel, to some extent, South Nation Conservation Authority					
Location	office 50 km E.of Ottawa	trailhead media at HQ	lectures, slides, tours from HQ	2 walking trails/log rds		
Time Period	MNR tabloid: re Larose naming as 1st Forest of Yr		advertise as year-round, but mostly summer	year-round (snowmobiles)	group Scout camping summer weekends, pre-arrangement	
Frequency	above 1989 update of old 1979 booklet; 1 printrun		as forester available; self-guided anytime	steer clear during hunt!	set ski tracks once/wk; schedule spraying vs insects	
Capacity	school groups phone 1 forester: book for Jun/Sept		160 km. trails, logging roads on 10,540 ha.	picnic lots park 30 cars	Ontario's most southerly moose herd: 2 wk. bull hunt	
Current Use	>108 sq. km, Ontario's 2nd largest planted forest		4,000 ed. grps; brochure-box so no car count	30,000 visitors per year	fall 1988/89 cull of moose in defined 1/4 of forest	
Satisfaction	same groups rebook each year, incl. summer Scouts		1 of few good bilingual driving tours: 1 hr	used: rally/horse events	Scouts can't cut brush; trapping-long-term licensing	
Program Strengths	18M treeplants: 1928-78.	MNR budget: bil. flyers?	glossy car-tour booklet +interp trail flyers	low conflict: hunters separated by zoning, times of day (AM), week, even year		
Program Weaknesses (Shortfalls/overruns)	'79 booklet out-of-date: 3/5 picnic sites closed	no winter access for car tour; no Advisory C'ttee	messages potentially reach urban visitor but not local hunters, trappers, snowmobilers?	pro-active planning needed to ensure the forest continues to support potentially conflicting use		may be paying for neglect of user ed'n: inc vandalism
Relevant Trends	Capital tourists unaware	vandalism-forced pullout	clients mostly French; MNR public'n policy?	OFFT bus/fall color 1/yr	private land intermixed	Conservation Authority aid?
Management Concerns	make aware: various uses	do signs ensure wise use	may have to charge user fees for pers. serv.	wooden walking bridge, Pineview nature trail & other facilities need checking		
Program Development Opportunities	Use other MNR contact pt to publicize achievement	international delegates are personally received?	self-guiding map coop. with So. Nation C.A. for canoeists & drivers; incl. Lemieux landslide interp. background already p7 of 1979 booklet		coop. with OFMC/MNR Keep rare spp. habitat needs	use hunter safety ed's opp. to foster stewardship ethic
Resources Used/Forecast	No data		1 extension forester for 11 months/yr	no ski fees: <100/wk-end		

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Campers and Day-users (Picnickers, Swimmers, Boaters, etc; motorized vehicles, hunters not allowed)

Services Provided: SITE: RIDEAU RIVER PROV PARK (ONT. MNR)	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	MNR			mandate: promote tourism		
Location	office 48 km S.of Ottawa		campground outdoor film presentation theatre	4 unsupervised beaches		
Time Period	MNR brochure pick-up at offices, mailout if asked		summer evenings	walk anytime on park rds		
Frequency	weekly posters on bulletin boards during season		2nd week May to mid-Sept.; no winter plowing	facility closed, winter		
Capacity			200 people/show, incl. from group campsites	campsites: 186/group 125		
Current Use			MNR environmental messages/R. Waterway incl.	camp, boat, fish & swim	provide sale firewood to prevent forest scavenging	
Satisfaction			few children's afternoon programs: day-users	self-guide fitness trail		
Program Strengths	50th Anniversary Special raised profile: Aug.'89		like entertaining films e.g."Never Cry Wolf"	fish for pike, walleye, muskie, bass; launch & nearby rental; campers reserve		
Program Weaknesses (Shortfalls/overruns)			content varies with Experience staffer hired and in 1986, only 22 programs reaching 1325	why use drop by campers from Ottawa Parks & Rec?	miss chance: migrating waterfowl (Sept closure)	vandalism?
Relevant Trends			response to needs of French-speaking camper?		mng. reforested farmland	maintain standards: Rec Pk.
Management Concerns			may have to charge user fees for pers. serv.			
Program Development Opportunities	Park brochure promotes exploration of historic, stone-built towns & weekday tours at K. Nursery		Can Parks Serv. van & Kempt. Nursery guests point way to coop programs: Marlborough too?		Coop with OFNC re rare spp. habitat needs?	
Resources Used/Forecast	No data		1 Experience staffer, for camping season	entrance fee waived/kids		

CURRENT SUPPLY OF REGIONAL SERVICES

VISITOR ACTIVITY GROUPS: Campers, boaters, Trail users and other Day-users (motorized vehicles, hunters not allowed)

Services Provided: SITE: MURPHY'S POINT PROV. PARK: MNR	Awareness Extension	Orientation Reception	Nature/Heritage Interpretation	Recreational Opportunity	Resource Protection	Facility Management
Responsibility	MNR		MNR, to some extent, Rideau Canal (CPS)			
Location	office 19 km S .of Perth		various sites, including kids' activities/guided hikes/evening shows			
Time Period	MNR tabloid supplements standard Prov.Pk brochure		mostly summer	year-round; lots plowed		
Frequency	tabloid new every 2 yrs.	weekly Park Notes	guided walks 2 or more times/wk; 2 self-guided nature trails anytime			
Capacity	1986/7 printrun: 14,000	pre-show campers visited	run about 75 programs/yr given staff of 2	175 campsites, 200 group		R. Trail + 4 hiking trails
Current Use	8,000 to local newspapers; 6,000 pk. distribution		5,000/yr., mostly families with children	___ visitors per year	nearby boat rental/fish	or pike, bass; loons in bay
Satisfaction	awareness level also increased via spec. programs		comment cards, 1986 Vs. Survey: games liked	Tay Valley Ski Club used		req. committed trail maint.
Program Strengths	Loyalist Days garnered strong support from locals		Art on Beach/other kids' activities 2 pms/wk	day/camp/walk-in beaches		no motorboats: Hogg/Loon Lk
Program Weaknesses (Shortfalls/overruns)	other specials costly for return: novelty or ones tied to particular Anniversary more popular x 10		1986 early bird count/breakfast drew only 25 (care taken not to overd hi-cost options)			no rainy-weather prog. bldg Lally Homestead/ski chalet?
Relevant Trends	1/3 paid ads offset cost				private land intermixed	Rideau Trail Assoc' aid?
Management Concerns	only prov interp in area- must build support base		maintain as standard for Natural Environment Provincial Park classif.			
Program Development Opportunities	Use other MNR contact pt to publicize activities		little ecological overlap with Marlborough Forest: Murphy's = Shield; our site = only rep of Smiths Falls limestone plain; history diff too		coop. with OFMC/MNR Komp rare spp. habitat needs	use interpretation opp. to foster stewardship ethic
Resources Used/Forecast	No data		.75 Py Visitor Services Coordinator + .35 Py Experience staffer + occasional R. Canal guest naturalists, local volunteers			

MARLBOROUGH FOREST INTERPRETIVE CONCEPT PLAN

1. DEMAND FOR INTERPRETIVE SERVICES

The demand for interpretive services can be measured in a variety of ways. Measurement revolves around two criteria: (1) quantitative assessment of the number of persons who would use the services; and (2) the characteristics of the demand (i.e., type of services required). Both aspects of demand for interpretive services in the Marlborough Forest are examined below.

1.1. Quantitative Assessment

a) Overall Population

Marlborough Forest is located in the southern corner of the Regional Municipality of Ottawa-Carleton (RMOC), mostly in Rideau Township. The communities within the RMOC closest to the Forest are:

to the east: North Gower, Manotick, Osgoode;
to the west: Munster, Ashton;
to the north: Richmond, Stittsville.

These communities fall within the townships of Goulbourn, Rideau and Osgoode.

The City of Nepean is the closest largest concentration of population, and in particular, the southern urban centre (SUC) which currently is comprised largely of the Barrhaven area. Table 1 presents information on the populations of the various municipalities in the RMOC for 1981 and 1986. Several areas have grown significantly in the five year period 1981 to 1986, notably Cumberland (+67%), Kanata (+39%) and Goulbourn (+29%). Rideau and Osgoode Townships also increased by 13.5% and 19.6% respectively over this five year period.

Table 1

Population by Municipality for RMOC, 1981, 1986

Municipality	1981	1986	% Change
Ottawa	295,160	300,765	+ 1.9
Vanier	18,795	18,430	- 1.9
Rockcliffe Park	1,870	2,030	+ 8.6
Cumberland	16,175	27,005	+ 67.0
Gloucester	72,860	89,810	+ 23.3
Goulbourn	9,560	12,300	+ 28.7
Kanata	19,730	27,520	+ 39.5
Nepean	84,365	95,490	+ 13.2
Osgoode	9,360	11,195	+ 19.6
Rideau	9,050	10,270	+ 13.5
West Carleton	9,930	11,830	+ 19.1
RMOC TOTAL	546,855	606,645	+ 10.9

Source: Data Handbook, Regional Municipality of Ottawa-Carleton, Planning Department, Policy and Program Division, February 1989.

While the population of the RMOC is growing, the average household size is decreasing (Table 2). For the total Ottawa-Carleton area, the number of persons per household has fallen from 3.4 persons to 2.7 persons from 1971 to 1986. Within Rideau Township, the decline has been from 3.8 persons to 3.2 persons. Within the growing SUC, the number of persons per household has dropped from 4.3 persons to 3.3 persons. This could signal a greater amount of discretionary time available for members of the households to pursue activities of interest (including work).

Table 2

Household Size Within Ottawa-Carleton, 1971 - 1986 (Number of Persons)

	1971	1976	1981	1986
Total inside the Greenbelt	3.4	2.9	2.6	2.5
SUC, Nepean	4.3	3.9	3.3	3.3
Rideau	3.8	3.5	3.2	3.2
Osgoode	3.9	3.6	3.3	3.2
West Carleton	3.6	3.4	3.2	3.1
TOTAL Ottawa-Carleton	3.4	3.0	2.7	2.7

Source: A Summary of the 1986 Census for Ottawa-Carleton, Volume 1: 100% Data, RMOC Planning Department, Policy and Program Division, February 1989.

Table 3 presents information on the population in selected municipal areas by age groups for 1986. This table indicates generally that in the areas around the Marlborough Forest, the majority of the population falls into two age groups: 0 - 14 years; and 25 - 44 years.

Table 3

Population by Age Group, 1986

Area	0 - 14	15 - 24	25 - 44	45 - 64	65 +	Total
Inside Greenbelt	74,230	81,590	153,895	94,800	52,315	456,830
(% of Total)	(16.2)	(17.9)	(33.7)	(20.8)	(11.5)	(100.0)
SUC, Nepean	3,965	1,600	5,895	1,510	235	13,205
(% of Total)	(30.0)	(12.1)	(44.6)	(11.4)	(1.8)	(100.0)
Rideau	2,465	1,550	3,465	2,020	775	10,275
(% of Total)	(24.0)	(15.1)	(33.7)	(19.7)	(7.5)	(100.0)
Osgoode	2,720	1,765	3,890	2,005	820	11,200
(% of Total)	(24.3)	(15.8)	(34.7)	(17.9)	(7.3)	(100.0)
West Carleton	2,950	1,585	4,325	2,100	870	11,830
(% of Total)	(24.9)	(13.4)	(36.6)	(17.8)	(7.4)	(100.0)
TOTAL OTTAWA - CARLETON	114,790	103,030	212,945	116,910	58,965	606,640
(% of TOTAL)	(18.9)	(17.0)	(35.1)	(19.3)	(9.7)	(100.0)

Source: A Summary of the 1986 Census for Ottawa-Carleton, Volume 1: 100% Data, RMOC Planning Department, Policy and Program Division, February 1989.

In the case of the SUC, three-quarters of the population falls into these two categories, signifying a preponderance of young families. Frequently, these families are looking for healthy outdoor activities which can be enjoyed by the whole family without a great deal of effort.

Table 4 contains projections of both populations and households in selected areas of the RMOC. The population of the RMOC is expected to increase by 10.5% between 1986 and 1991 and by a further 15.1% between 1991 and 2001. Areas such as Rideau and Osgoode Townships are expected to grow at higher relative rates than the RMOC overall, but the absolute numbers are still relatively small. On the other hand, Goulbourn is projected to grow by 37.9% and 44.4% for these same time periods. Similarly, the SUC in Nepean is expected to increase by 73.9% between 1986 and 1991 and by 82.0% between 1991 and 2001. This will bring the population to over 40,000 persons, over three times the 1986 population.

As populations grow and natural resources are converted (in this case from agriculture and forestry or open land to housing and other urban uses), the demand for 'green space' in the local area will also grow. It is not known if this demand will grow in proportion to the population increase or at a higher or lower rate. The demand, however, will exist for green space where a variety of passive and active recreational activities can be undertaken.

The demand for natural interpretation programs and services is primarily dependent upon the type and quality of the program available, and its location. Generally, interpretive services are used by visitors who are unfamiliar with the resources in the area. For example, visitors from outside the local area or from other provinces or states are more likely to take advantage of interpretive services when they are offered in association with another activity such as camping or visiting a park. Local residents are less likely to use the services unless there is something unique or special about the program being offered. In other words, even though there may be a significant population from which to draw participants, there is no guarantee that an interpretive program would be used by the local public. With the number of residents in the RMOC, however, if only 5% of the 1986 population participated in an interpretive program at the Marlborough Forest just once, this represents 30,000 persons benefitting from the program. If a program is developed to take advantage of and complement other compatible recreational activities, significantly greater participation and benefit can be achieved.

Table 4

Draft Projections: Population and Households, RMOC

Area	1986 Pop.	1986 Hshold.	1991 Pop.	1991 Hshold.	2001 Pop.	2001 Hshold.
Total RMOC	606,643	228,135	670,080	258,710	771,573	309,100
Total Rideau	10,270	3,225	11,350	3,830	14,790	4,980
Total West Carleton	11,830	3,800	13,907	4,605	17,995	6,205
Goulbourn						
rural	7,000	1,710	6,892	2,290	9,247	3,200
Stittsville	5,300	2,225	10,066	3,300	15,237	5,200
Total	12,300	3,935	16,958	5,590	24,484	8,400
Nepean						
SUC	13,200	3,980	22,959	7,130	41,788	13,480
Total	95,490	31,830	107,494	37,050	124,996	44,475
Total Osgoode	11,200	3,495	13,046	4,195	16,469	5,545

Source: RMOC Planning Department, Policy and Program Division, November 1989.

b) Non-Resident Tourists

In 1987 there were an estimated 3.6 million tourists to the National Capital Region. By 1997 this number is expected to grow to approximately 5 million[1]. These visitors are expected to visit the National Capital Region in the following proportions by season:

Spring -	1.2 million (24%)	Summer -	2.4 million (48%)
Fall -	1.05 million (21%)	Winter -	0.35 million (7%).

The extent to which tourists to the area can be expected to visit the Forest is unknown. There are no figures available which would help project such visitation. Visits by tourist parties would probably be related to the level of promotion within the area and the degree of use and enjoyment that local area residents get from their use of the Forest. Both are impossible to predict at this point. (There were no visitor surveys at other interpretive facilities in the region to help estimate the proportion of local/non-local visitors.)

c) Visitor Activity Groups

There are many different groups presently using the Marlborough Forest. These are best identified by type of activity.

Recreation
Rideau Trail Association
Field Naturalists
hunters
snowmobile clubs
cyclists

Commercial
Forest Industries Association
farmers
trappers

Other
resident land owners
military
Boy Scouts, Girl Guides

[1] P.G. Whiting and Associates, Ottawa Locks Visitor Activities Options Investigation, Development Options for Visitor Activities, Ottawa, April, 1989.

In addition to these visitor activity groups, a number of other organizations and groups also have an interest in or are concerned with the Forest, including:

- non-resident landowners
- Rideau Township
- Goulbourn Township
- Goulbourn Environmental Advisory Committee
- Ruffed Grouse Society
- Grenville-Carleton Sportsman and Conservation Club
- Smith's Falls Fish and Game Club
- Ontario Federation of Anglers and Hunters
- Ducks Unlimited.

Finally, one of the largest potential users of a Forest interpretive program are the area schools and school boards:

- Ottawa Board of Education
- Ottawa Roman Catholic Separate School Board
- Carleton Board of Education
- Carleton Roman Catholic Separate School Board
- Lanark County Board of Education
- Leeds and Grenville Board of Education.

In terms of developing a quantitative assessment of the potential use of interpretive programs by all user groups, it is clear that many (if not most) will not be interested. The two groups which offer the greatest potential (in numeric terms) are the field naturalists (nature observers) and the educational groups. If they do use interpretive services, particularly in-park self-guiding types of services, individuals in most of the other groups can be classified as nature observers (because of the multiple motivations for visiting the Forest). As a consequence, estimates of use will be made only for these two overall groups. To derive estimates of participation in other recreational activities exceeds this study's Terms of Reference.

1. Nature Observers

The demand by nature observers for interpretive services is difficult to estimate: some are more avid than others in their approach. The Ottawa Field Naturalists lists several hundred members but probably represents over a thousand individuals (family memberships, etc.). There are also other naturalist clubs in the area (e.g., Macoun Field Naturalists). The existence of these clubs, however, does not guarantee that all members will use or visit the

established natural areas. Those living close to a natural area or with a special interest are most likely to visit the area. On the other hand, naturalists are generally more interested and knowledgeable about these areas than the general public; and they probably will have a lower requirement for interpretive services.

Members of the general public can also be classified as 'nature observers'. A 1987 Statistics Canada survey of Canadians on the subject of wildlife[2] found that approximately 14 million Canadians (70.3% of the population 15 years or older) participated in one or more residential wildlife-related activity (feeding, watching, photographing or studying wildlife and maintaining plants or shrubs to promote food or shelter for wildlife). This same survey found that Canadians recorded approximately 873.4 million days engaged in residential wildlife-related activities around their residences or cottages, for a national average of 62.2 days per participant. Residents of Ontario spent more time than the national average (66.5 days per year).

In addition to residential activities, 4.4 million Canadians (22.0% of the population over 15 years) took primary non-consumptive wildlife-related trips. The two most common activities on these trips were watching and photographing wildlife. Most participants were urban residents and possessed a secondary school education. Individuals with higher education are more likely to participate in these trips, according to the survey. These trips represent 74.4 million days, or an average of 16.9 days per participant. Residents of Ontario average 16.2 days per participant.

Clearly, there is a significant demand for wildlife related activity areas. A substantial proportion of Canadians participate in these non-consumptive activities around their residences or on specific trips.

If these numbers are representative of the population living in the RMOC, then through the use of certain assumptions, crude estimates of demand can be generated. If 22% of the RMOC population took primary non-consumptive wildlife-related trips in 1986, this would mean that approximately 133,000 persons took such trips. Assuming an average of 16.2 days per participant, this translates to 2.15 million activity days. If it is further assumed that half of these activity days were spent within the National Capital Region (as opposed to days spent on trips outside the region), then approximately 1 million activity days were spent on non-consumptive trips directly related to wildlife within the region. If 10% of the 133,000

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[2] The Importance of Wildlife to Canadians in 1987: Highlights of a National Survey, Environment Canada, Canadian Wildlife Services, 1989.

RMOC residents taking trips could be directed towards the Marlborough Forest, then the estimated number of participants would be approximately 13,300. Ten percent of the total participants was selected as a reasonable expectation, on the basis that there are about twelve areas offering similar types of programs in the general National Capital Region. Similarly, if 10% of the estimated 1 million activity days can be directed toward the Forest, then approximately 100,000 activity days would be spent in the Forest.

It is difficult to determine the degree of reliability of these estimates when use of the Forest is currently at low levels. The Rideau Trail Association, for example, indicated that their use of the trail amounts to between 200 and 300 user-days, in organized walks, annually. The Jock River Fish and Game Club estimates there are about 350 deer hunter-days spent in the Forest during the deer hunting season.

To generate the projected level of demand, it will be necessary to ensure that the general public in the RMOC is made well aware of the Forest, its attributes and its visitor program. While no firm predictions of future demand are made here, it can be stated generally that as urban growth continues in the RMOC and fewer opportunities for a natural environment experience are available in close proximity, the visitor use of the Marlborough Forest will grow. Some of that use will be or could be directed toward nature appreciation. The demand for and use of natural interpretation will depend largely upon the type, quality and location of the program developed.

2. Educational Groups

These groups include area schools, and non-school organized groups. Since it is difficult to ascertain the interest and extent of the latter, emphasis has been placed on school groups. In the course of this study, officials of various school boards[3] and several teachers were interviewed to determine the level of interest and possible use of the Forest.

Both the Ottawa Board of Education and the Carleton Board of Education have natural interpretation and outdoor education programs at sites owned and operated by the boards: McSkimming for the OBE, and the Bill Mason Centre for the CBE. These facilities and programs are used by both primary and secondary students. Neither of the Roman Catholic Separate School Boards for Ottawa and Carleton has any specific facility for outdoor

[3] School boards contacted included: Ottawa Board of Education, Ottawa Roman Catholic Separate School Board, Carleton Board of Education, Carleton Roman Catholic School Board, Lanark County Board of Education, Leeds and Grenville Board of Education.

education, although the Ottawa board is looking at the possibility of developing a property west of the city.

While the boards are generally responsible for the curriculum, course planning and development, activities such as field trips are usually left to the teachers to organize and arrange. Some of the comments received from the various boards included:

* there are many sources for natural interpretation and outdoor education in the Ottawa area;
* there must be some aspect of the Forest or its interpretive program that is unique or at least different from other areas if the Forest is to attract school groups;
* Marlborough Forest is a long way from most of the city schools;
* the cost for services rendered by the interpretive programs is a prime concern (most schools cannot afford programs with fees);
* do not be optimistic about the number of schools or classes which would make use of the program;
* some level of use would probably be made of the facility, depending upon its nature and location;
* marketing and promotion of the site will be required, directly to science and geography teachers;
* teachers generally want help in teaching their classes on field trips;
* teachers will normally use the closest available facility.

The teachers contacted showed interest in the possibility of another outdoor education facility or resource being made available to them, but they echoed many of the concerns expressed by the board officials (notably cost, distance and time, and the quality of the program).

Elementary school groups presently make use of other public facilities in the RMOC area, including the Log Farm (3,000 - 4,000 students), Foley Mountain (approximately 4,000 students), Baxter Conservation Area (approximately 4,200 students), and the Kemptville Forestry Station (3,200 - 4,000 students).

Since these are relatively well established facilities and programs, it could not be expected that the Marlborough Forest would attract the same number of students in its initial stages. Once a program is well established (say within ten years), it appears that 4,000 primary grade students would be the maximum number reasonably expected.

The whole aspect of continuing education, elder hostels, and courses run by universities,

colleges and private institutions has not been examined in detail. While courses such as 'Canadian Flora and Fauna', 'Wetlands Environments', 'Nature Photography' and 'Bird Watching' appear to be popular, the extent to which they use established public natural areas is not well known. It is believed they represent a minority of the users of such areas. Further, the extent to which the Forest would be attractive to such educational groups is difficult to determine.

Summary

Based on the assumptions presented earlier, it is possible that the number of persons visiting the Marlborough Forest when it has an established interpretive program could be:

general public	- 13,300
students	- 4,000
TOTAL	- 17,300

It must be noted, however, that these numbers are purely speculative and will depend upon both the program developed and its promotion.

1.2. Characteristics of Demand

The characteristics of demand for interpretive services, as defined by the needs of different visitor activity groups, provide a measure of the potential responsiveness of any program developed. While for numeric purposes, the number of visitor activity groups was restricted, in terms of satisfying demand and generating interest by different activity groups in the Marlborough Forest and its interpretive program, it is useful to examine the needs of a wider range of groups. For the purposes of this interpretive plan, six overall visitor activity groups have been identified:

- hunters
- educational groups
- trail users
- nature observers
- picnickers, day users
- powered vehicle users.

The needs or service requirements for each of these groups have been categorized by:

* Pre-Trip Awareness and Extension
* Orientation and Reception
* Nature Interpretation
* Resource Protection
* Facility Management and Administration.

In addition, information or services which the Forest managers may wish to provide these groups can be described in these categories. Each groups's services requirements are described below.

A. Hunters

1) Pre-Trip Awareness and Extension
- information that hunting is an acceptable activity on site;
- requirement to know hunting seasons;
- restricted areas for hunting.

2) Orientation and Reception
- designated hunting areas and non-hunting areas;
- site orientation.

3) Nature Interpretation
- appropriate hunting practices, species, identification.

4) Resource Protection
- habitat management for hunting different species;
- non-use by other conflicting groups.

5) Facility Management and Administration
- hunt camps;
- access roads.

B. Educational Groups

1) Pre-Trip Awareness and Extension
- information on services available, program, resources, interpretive themes and complementary activities;
- hours/days of operation;
- contact person.

2) Orientation and Reception
- clear directions;
- site orientation, layout;
- facilities, services available;
- options for on-site activities;
- parking facilities safe for boarding and handling large vehicles.

3) Nature Interpretation
- personal services or good resource material (brochures, etc.);
- self-guiding trails with appropriate interpretive signage.

4) Resource Protection
- controlled access to and use of the major interpretive resources;
- appropriate resource management;
- protection of resources from vandalism.

5) Facility Management and Administration
- sufficient size and scope to handle groups;
- availability of further information on items of interest (related to major themes);
- availability of accessible space for group presentations.

C. Trail Users

1) Pre-Trip Awareness and Extension
- information on facilities, services available;
- information on user groups (e.g. Rideau Trail Association, etc.);
- compatible activities;
- attractions and features.

2) Orientation and Reception
- identification of boundaries;
- site orientation, layout and locations of trails and activity nodes (if any);
- parking facilities;
- identification of different options (trail loops).

3) Nature Interpretation
- good brochure with trail layout and specific points of interest;
- opportunities for guided tours.

4) Resource Protection
- clear marking of trails to discourage off-trail activities;
- possible re-alignment of trails away from sensitive areas or hunting areas;
- maintenance of high quality trails (winter and summer).

5) Facility Management and Administration
- potential for groups to have separate facilities.

D. Nature Observers

1) Pre-Trip Awareness and Extension
- basic information (location, services, program, facilities, period of operation, etc.);
- interpretive themes and major resources;
- generation of expectations.

2) Orientation and Reception
- site orientation;
- activity areas;
- natural resources and interpretive program.

3) Nature Interpretation
- personal or non-personal services;
- self-guiding trails with interpretive signage;
- use of brochures.

4) Resource Protection
- protection of interpretive resources and management for sustainable use;
- appropriate habitat management.

5) Facility Management and Administration
- stopover points;
- road access;
- trail maintenance.

E. Picnickers, Day Users

1) Pre-Trip Awareness and Extension
- basic information (location, facilities, services, period of operation, etc.).

2) Orientation and Reception
- minimal requirement.

3) Nature Interpretation
- ability to participate in existing program or to use existing facilities;
- availability of basic interpretive information.

4) Resource Protection
- no special requirements.

5) Facility Management and Administration
- provision and maintenance of basic facilities (picnic tables, benches, open area, multi-purpose areas, washrooms).

F. Powered Vehicle Users

1) Pre-Trip Awareness and Extension
- acceptability/compatibility of vehicle use;
- availability of designated areas.

2) Orientation and Reception
- site orientation;
- identification of non-use (restricted) areas.

3) Nature Interpretation
- no special requirements.

4) Resource Protection
- designation of trails or certain areas for specific use to discourage use of other areas.

5) Facility Management and Administration
- no special requirements.

1.3. Flagged Management Issues

As part of the identification of demand for interpretive services, a wide range of interested groups were contacted. These groups all have an interest in or concern for the Marlborough Forest[4]. Described here, in summary form, are the concerns expressed by the groups when approached about an interpretive plan for the Forest.

Rideau Trail Association
- security of trail facilities (trail building);
- incompatible (and general) development occurring around the Forest;
- maintenance of a quality trail.

Ontario Federation of Anglers and Hunters
- want to see the area saved for hunting.

Jock River Fish and Game Club
- conflicts with non-hunters;
- placement of interpretive facilities and services;
- habitat maintenance.

[4] Not all the groups or persons identified by the Study Steering Committee were contacted: a number of these had no bearing upon the demand for interpretive services.

Resident Landowners

- location of interpretive facilities, services;
- potential problems related to road use, fires, etc..

Ducks Unlimited

- safety concerns around installations;
- time left in agreement with RMOC/MNR;
- plan must be sensitive to their activities.

Forest Landowners

- continued proper forest management;
- location of interpretive facilities, services

Farmers

- too many trails;
- control of pest animals (coyote, beaver).

Non-Resident Landowners

- legal liability of landowners vis-a-vis trespassers;
- restrictions on the management of forest resources.

Ottawa Field Naturalists

- conflicting uses (ATV's, hunters).

Ottawa Cyclists

- physical set-up to facilitate cycling (integrating it into site use).

Ruffed Grouse Society

- maintaining the area for hunting
- improve habitat.

School Boards

- cost to use the program;
- uniqueness of the program;
- location of the facilities, services.

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